

Summit County Regional Transit Study Final Report

December, 1999

Prepared for:
Utah Department of Transportation
Mountainland Association of Governments
Summit County

Prepared by:



FEHR & PEERS ASSOCIATES, INC.
Transportation Consultants

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SUMMIT COUNTY REGIONAL TRANSIT STUDY

TABLE OF CONTENTS

1. PROJECT BACKGROUND.....	1
2. STUDY AREA.....	2
A. PARK CITY, SNYDERVILLE BASIN AND KIMBALL JUNCTION.....	4
B. GREATER SUMMIT COUNTY AREA	4
C. WASATCH COUNTY/HEBER CITY	4
D. SALT LAKE COUNTY LIMITS	4
3. EXISTING SERVICES	5
A. PARK CITY TRANSIT	5
B. UTAH TRANSIT AUTHORITY.....	6
C. CANYONS SHUTTLE	6
D. PRIVATE SERVICES.....	7
4. ESTABLISHING RIDERSHIP DEMAND.....	8
A. TOURISM RIDERSHIP ANALYSIS	8
B. WORK AND NON-WORK TRIP ANALYSIS	9
C. TRANSIT FOR PERSONS WITH DISABILITIES	10
5. SERVICE ALTERNATIVES.....	13
A. LOCAL SERVICE ALTERNATIVES	13
B. COMMUTER SERVICE ALTERNATIVES	21
C. SALT LAKE COUNTY SERVICE.....	28
D. COMPARISON OF SERVICE ALTERNATIVES.....	28
6. EVALUATING PUBLIC AND POLITICAL RESPONSE.....	34
A. SNYDERVILLE BASIN PLANNING COMMISSION	34
B. PARK CITY COUNCIL.....	35
C. MAYOR OF OAKLEY	36
D. MAYOR OF COALVILLE	37
E. PUBLIC COMMENTS.....	37
7. TRANSIT FRIENDLY DESIGN FEATURES.....	39
8. TRANSIT SYSTEM COMPARISONS.....	45
9. FUNDING AND MANAGEMENT OPTIONS.....	47
A. FEDERAL FUNDING SOURCES	47
B. LOCAL FUNDING SOURCES.....	48
C. OVERSIGHT OPTIONS	49
D. SAMPLE FUNDING SCENARIOS	52

APPENDIX

Summit County Regional Transit Study

1. Project Background

In March 1999 Fehr & Peers Associates, Inc. was hired to complete a feasibility study for transit in the Summit County area. Although the study concentrates on the Park City/Snyderville Basin corridor, it also considers service to the greater Summit County area, as well as Heber City and Salt Lake City. The study is sponsored by the Utah Department of Transportation, Mountainland Association of Governments, and Summit County.

A steering committee was established to help guide the study. The committee consists of representatives of Mountainland Association of Government, UDOT, Summit County, Park City and Snyderville Basin. In addition, members were included from the school community, the disabled community as well as The Canyons ski resort. The steering committee met monthly to discuss the progress of the study and determine next steps.

Over the course of six months, the project team has completed the following tasks:

- ♦ Demand Estimation
Transit demand was estimated for several user groups including tourists, workers, non-work trips, and persons with disabilities.
- ♦ Provide service options
Based on the results of the demand estimation, service alternatives were presented for a variety of routes throughout the county.
- ♦ Estimate costs based on demand
For each service option, costs were estimated for the total cost of implementation, as well as the cost per rider.
- ♦ Evaluate political and public support
Based on interviews with key political figures and a comment sheet distributed to the general public, support was gauged for transit.
- ♦ Identify economic and administrative options
Funding and management options were identified and discussed.

2. Study Area

The study area consists of several geographic regions, each with its own set of transit needs. In addition to evaluating the feasibility of transit service with the limits of Summit County, Salt Lake County and Wasatch County were also considered. Within Summit County, there are two distinct regions considered, the Park City to Kimball Junction corridor and Greater Summit County. Each distinct area requires a different type of service. Tables 1 and 2 show population statistics for census designated places within Summit County. Additionally, population estimates have been added for Snyderville Basin and were gathered from an estimation of block group data. Study areas are described below and shown in Figure 1.

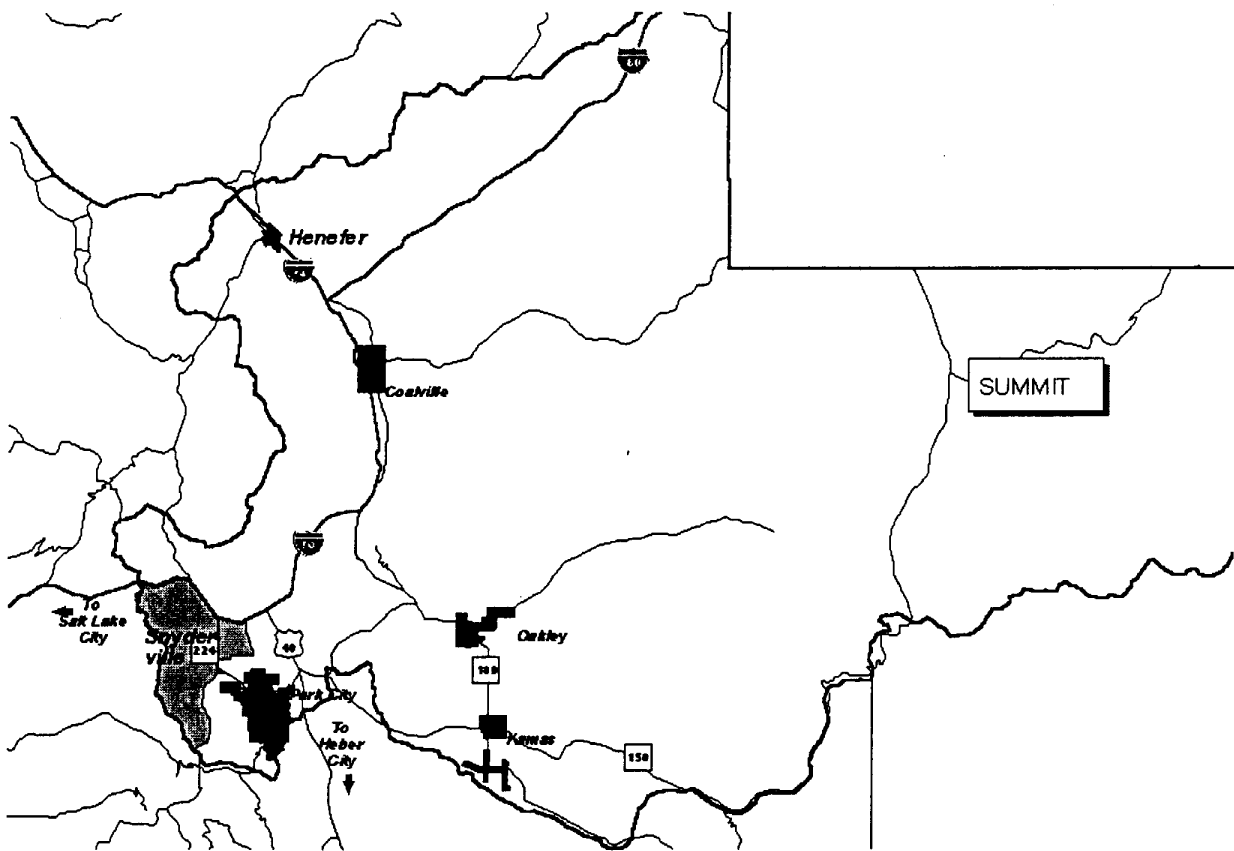


Figure 1: Study Area

Table 1
1990 Summit County Population

Place	1990 Total Population	% of Total
Coalville city	1,025	6.6%
Henefer town	594	3.8%
Kamas city	1,061	6.8%
Oakley town	556	3.6%
Park City city	4,468	28.8%
Snyderville Basin Area*	2,879	18.6%
Balance of Summit Co.	4,935	31.8%
TOTAL	15,518	

Table 2
1997 Summit County Population

Place	1997 Total Population	% of Total	% Change from 1990
Coalville city	1,305	5.3%	27.3%
Henefer town	666	2.7%	12.1%
Kamas city	1,465	5.9%	38.1%
Oakley town	843	3.4%	51.6%
Park City city	6,210	25.2%	39.0%
Snyderville Basin Area*	6,589	26.8%	128.9%
Balance of Summit Co.	7,546	30.6%	52.9%
TOTAL	24,624		

Source: Governors Office of Planning and Budget

*Snyderville Basin Estimated from Census Block Group Data

Table 3
Projected 2020 Summit County Population

Place	Projected 2020 Population	% of Total	% Change from 1997
Coalville city	3,150	6.2%	141.4%
Henefer town	805	1.6%	20.9%
Kamas city	2,733	5.4%	86.6%
Oakley town	1,475	2.9%	75.0%
Park City city	10,246	20.2%	65.0%
Snyderville Basin Area	21,736	42.8%	229.9%
Balance of Summit Co.	10,583	20.9%	40.2%
TOTAL	50,728		

Source: Governors Office of Planning and Budget

*Snyderville Basin Estimated from Census Block Group Data

A. PARK CITY, SNYDERVILLE BASIN AND KIMBALL JUNCTION

The corridor between Interstate-80 and the city of Park City along Highway 224 is considered the Park City, Snyderville Basin, and Kimball Junction area. At its northern end, Kimball Junction is home to outlet shopping malls, newer residential development and is growing with 'big box' retail outlets such as K-mart and Walmart. The Kimball Junction area also serves outlying subdivisions to the east, Jeremy Ranch and Pinebrook. Snyderville Basin, for the purposes of this study, is considered the area of The Canyons Ski Resort. While currently under construction, build out at The Canyons will be close to 3700 residential and commercial units, becoming a major destination ski area and resort. At the southern end of the corridor, Park City is characterized by a major tourist industry attracted by two world class ski resorts, Park City and Deer Valley. In addition to skiing, Park City also attracts visitors to its Old Town Main Street and extensive accommodations. Throughout the corridor, residential areas are growing as new subdivisions are linking Park City, Snyderville Basin and Kimball Junction.

B. GREATER SUMMIT COUNTY AREA

Unlike the Park City area, greater Summit County is largely rural, with an economy based on many industries, rather than solely tourism. The county is considered roughly as two major centers, North Summit and South Summit. The North Summit area includes Kamas and Oakley, serving populations surrounding these towns. The South Summit area includes the Coalville area. Coalville is the county seat and government center for Summit County. Outlying areas of Summit County were also considered, with few towns dotting the rural landscape.

C. WASATCH COUNTY/HEBER CITY

Because of the proximity of Heber City to Summit County, Wasatch County is considered in the study. Heber City is a growing city that draws its livelihood through a variety of industries. Known for its bucolic valleys and fertile ground, the Heber Valley serves as the county seat for Wasatch County, providing health services, shopping, and the government center for the county.

D. SALT LAKE COUNTY LIMITS

Although not directly in the study area, Salt Lake County was considered as part of the study area because of its proximity to Summit County, its large employment base, and the airport that begins most tourist trips to Summit County.

3. Existing Services

Gathering information about existing service is important to understand transit supply. Several services currently exist in the Park City/Snyderville Basin area. The most obvious service is Park City Transit. In addition, several private companies provide transportation on a demand response basis.

A. PARK CITY TRANSIT

Park City Transit has been providing transportation services for 23 years within the city limits of Park City at no charge. Ridership has increased steadily and peaked last year at approximately 1.7 million riders. Of these riders, 83% of usage is during winter, defined as November through March.

Services

Park City currently runs a free service within the city limits. Because ridership characteristics are different in the winter and summer months, transit service differs by season. In the winter, three core routes serve the entire city.

- ♦ Main Street / Deer Valley
- ♦ Prospector Square
- ♦ Park Meadows

Service on all routes is provided from 8:00 a.m. to 11:00 p.m. The primary destinations for all routes are the Park City and Deer Valley Ski Resorts during the day, and Main Street during the evening. Service runs at about every 10 minutes between the two resorts.

Core summer service is similar to winter service with a slightly faster interval between routes. Summer boardings are approximately 25% of winter boardings on most routes. The primary summer destination is Old Town. More detailed data for the Park City Transit District can be found in the *Park City Short Range Transit Plan, LSC, 1999*.

Ridership Characteristics

An on-board survey conducted in July, 1999 showed ridership patterns for Park City Transit. The study was conducted for four days and yielded a total of 430 responses. Questions were designed to understand trip purposes and to determine the percentage of visitors who have access to an automobile. Figure 2 shows a graphic representation of trip purposes within Park City. It is

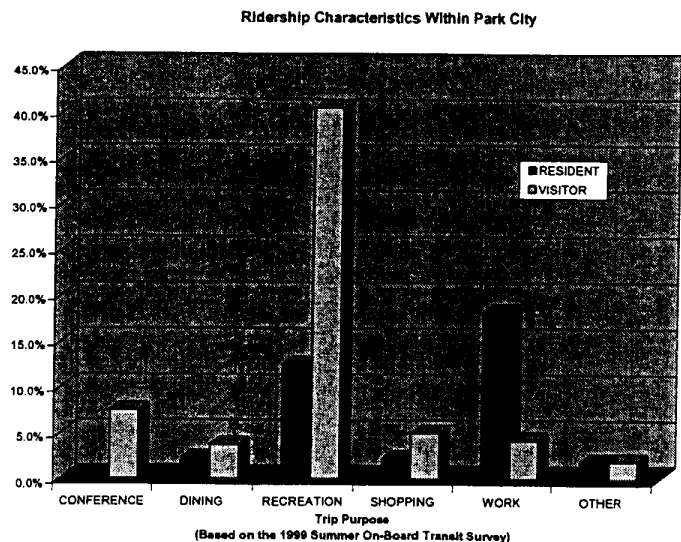


Figure 2: Ridership Characteristics in Park City

interesting to note the high number of residents who use transit for work (18% of residents). Thirty-nine percent of visitors use transit for recreation. Table 4 shows the percentage of visitors who have access to automobiles. The assumption used for estimating demand, discussed in a later chapter, is that visitors without access to a vehicle are very likely to use transit. The percent of visitors with no vehicle (18%) can be applied to the general population of a tourist area to obtain a number of tourists who would use transit. This methodology is discussed in demand estimation.

Table 4
Resident and Visitor Vehicle Access

RESIDENTS WITH NO VEHICLE ACCESS	18%
RESIDENTS WITH VEHICLE ACCESS	21%
VISITORS WITH NO VEHICLE ACCESS	18%
VISITORS WITH VEHICLE ACCESS	44%
<i>Grand Total</i>	100%

Resources

The Park City Transit District owns fourteen 34 passenger buses, two of which are used for back up purposes only. In addition, a trolley runs in the summer and has a capacity of 28 passengers. The District also has four passenger vans that carry between 10 and 24 riders each. The fleet is garaged and maintained at the Public Works complex in Park City.

B. UTAH TRANSIT AUTHORITY

The Utah Transit Authority began running a small commuter service between Heber City and Park City. The shuttle runs from Heber City at 6:30 a.m. for Park City, and leaves Park City at 4:00 p.m. to complete the return route. In addition, a van serves Salt Lake City, arriving at 1300 East and I-80 at 7:15 a.m. and leaving for the return at 5:15 p.m. Service to Salt Lake City costs riders \$10.00 per day round trip.

C. CANYONS SHUTTLE

Last year The Canyons began major construction altering its base facilities. As a result, mobility to and from the resort, as well as within the site became difficult. To offset the problem The Canyons hired LeBus to operate a shuttle to serve The Canyons. The Canyons shuttle served approximately 10 downtown Park City hotels at an interval of roughly two buses per hour. Heavier service was provided at peak loading and unloading times. In addition, a second type of bus route brought skiers from remote lots to the base area. The Canyons has plans to continue this type of service this year and is currently in the process of procuring a contract.

D. PRIVATE SERVICES

A transit provider survey was sent to all private transportation services in, or with service to, the Summit County area. The survey is included in the appendix. A total of 5 were returned.

Le Bus

Le Bus provides transportation service throughout the United States. Locally, the service operates from Salt Lake City and serves all of Summit County. A demand response service runs everyday and focuses mainly on charter services. There are 40 full time and 60 part time drivers, 80 buses, and six vans. Service does not vary by season. About 20% of Le Bus service is for employees of Deer Valley. Additional business is from a contract service with The Canyons, providing shuttle services due to construction in the area, and through local charter ski service.

Park City Transportation Service

Park City Transportation Service primarily runs airport transportation and local taxi service. The company is based in Park City and serves locations throughout Summit County and Salt Lake City. The system operates on both a fixed route and demand-response basis, 7 days a week from 6 a.m. to midnight. There are 40 full time and 10 part time drivers operating 32 vans in the winter and 12 during the summer. The service is essentially for tourists. The company has plans to grow with the community.

Park City School District

As the name implies, the Park City School District provides transportation exclusively for school children. Buses are housed in a garage in Jeremy Ranch. There are a total 27 buses and 2 vans transporting the entire school district.

Ute Cab Company

The Ute Cab company provides taxi service throughout Utah 24 hours a day, 7 days a week. There are 70 full time drivers and 57 cars.

Lewis Brothers Stages

Lewis Brothers Stages provides extensive service between Salt Lake City and Park City. The service runs from the Salt Lake City airport to many resorts and hotels in Summit County.

Additional Services not Responding to the Survey

All Resort Express and Canyon Transportation were contacted but did not respond the survey. Both provide service between Salt Lake City and Park City.

4. Establishing Ridership Demand

Ridership demand was estimated based on four groups of potential transit riders; tourists, workers, non-workers and mobility impaired.

A. TOURISM RIDERSHIP ANALYSIS

In the 1997/1998 season the Park City area had an estimated 1.6 million visitors to the area. Most of these visitors are in the winter, as three major ski areas create an attractive destination point. Winter visitation (November through March) is about 80% of the overall tourism visits.

Because of the high concentration of activities for tourists, three major geographic destinations were considered for demand estimation, Park City, Snyderville Basin and Kimball Junction. With two ski resorts within a mile (Park City and Deer Valley) and Old Town Main Street, downtown Park City was viewed as the largest generator and attractor of transit trips. With Park City as a beginning point, demand for service was examined within the Park City limits, from Park City extended to The Canyons, and from Park City to The Canyons and Kimball Junction.

Demand for transit within Park City was estimated using existing characteristics of Park City Transit. Results were matched to the Park City Short Range Transit Plan (LSC, 1999) to verify the estimates. Presently, tourist demand for transit in Park City is approximately 930,000 annual trips. In the future, it will grow to an estimated 1.7 million annual trips.

Based on our research of transit within Park City, a daily factor of trips was applied to a ratio of bed bases in each of the study areas to obtain a relative demand estimate for Snyderville Basin and Kimball Junction. Assuming transit were to exist presently, tourist demand for transit between Park City and Snyderville Basin was estimated at 155,000 annual trips, while annual trips within the Snyderville Basin/Kimball Junction area would be approximately 10,000.

Future demand for Snyderville Basin would be 510,000 annual trips, while within Snyderville Basin and Kimball Junction demand would be close to 170,000 trips. The evident increase in the Snyderville Basin area is rooted in the

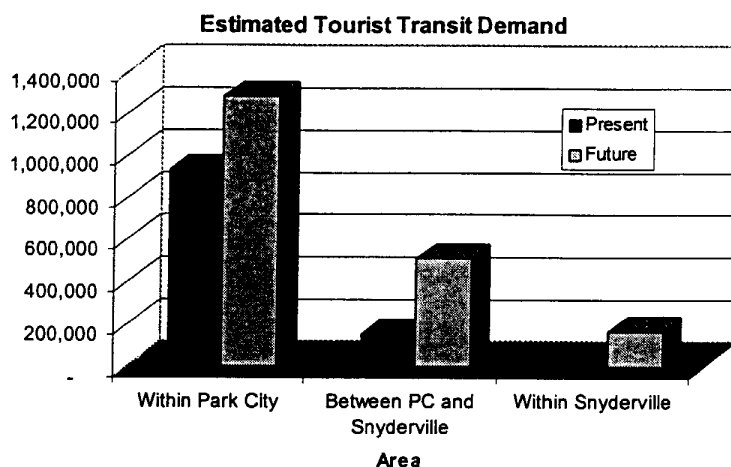


Figure 3: Tourism Demand

expansion of The Canyons ski resort. If The Canyons reaches build-out capacity, their bed base will triple, thus increasing the estimated transit trips.

B. WORK AND NON-WORK TRIP ANALYSIS

While tourism is largely confined to the Park City/Snyderville Basin area, work and non-work trips were estimated for the entire county. The term work-trip encompasses the commuter travelling to and from the work place. A non-work trip is a trip made for any other purpose than work, tourism, or paratransit. Typical non-work trips include shopping, dining, and trips classified as 'other'.

The U.S. Census Bureau, for purposes of data collection, has divided each county into tracts, block groups and blocks. Most data collected from the Census Bureau is based on a (theoretical) 100 percent sample of households, although some information is based on limited sample data and then applied to the larger population. 'Places' are aggregates of blocks and are established municipalities or non-incorporated areas designated by the county. This study uses places for a more detailed view of cities within the County, and a finer analysis of the location of both work and non-work trip analysis and for demographic analysis of mobility impaired groups, discussed later. The 1990 and 1996 population data was obtained from the U.S. Bureau of the Census. Projections for 2020 population for each city were obtained from the Governor's Office of Planning and Budget. For the year 1990, the Census Bureau has made available a complete demographic break-down of the population (as shown in Table 1).

Census data provides detailed information on how people travel to work. Typically, between one and five percent of all work trips are transit trips. Based on this data, and what we know about transit use characteristics, an estimate of demand can be taken for each city based on their population, population growth, and work trip data. Based on the number and destination of work trips throughout the county a 2% transit use number was applied to the total work trip number to obtain a total transit use estimation for each location. Work trip estimates by location are shown in Figure 4.

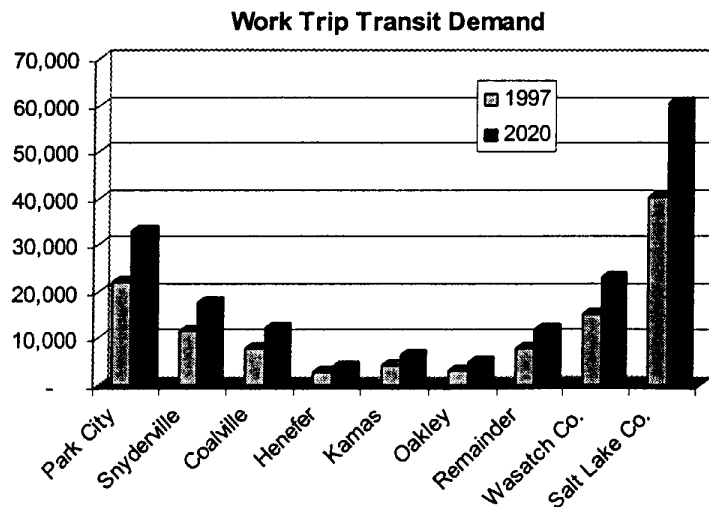


Figure 4: Work Trip Demand

Additional estimates of commuter traffic were made by gathering data from the Utah Department of Workforces Services. Conclusions from this data are discussed in Chapter 6, Service Alternatives.

Historically, non-work trips are usually slightly higher than work trips. Based on the data that was compiled for work-related trips, non-work trips are increased to show expected travel trends. Detailed tables are shown in the Appendix.

C. TRANSIT FOR ELDERLY AND PERSONS WITH DISABILITIES

Transit for persons with disabilities encompasses five major categories corresponding to the segments of population most affected by transit. These categories include:

- **Age 65 and over**
The provision of transit to the elderly population will ensure that people in need will have adequate transportation to necessary services, such as doctor appointments and shopping. It will also provide the necessary mobility to keep the elderly involved in the community. Transit may also facilitate employment for this population.
- **Mobility limited**
As with the elderly population, the mobility impaired, such as those with physical or mental disabilities, need transportation to services, as a means to stay involved in the community, and the opportunity to be employed.
- **Population living under the poverty level**
People who cannot afford private vehicles, or who spend a disproportional amount of their income on (poor operating) automobiles, could be given the same opportunities for transportation service, community involvement and employment with transit. This group could benefit by the cost savings typically associated with transit trips as compared to automobile trips.
- **People who have no vehicle**
As with those who can not afford a vehicle, people who either choose not to have a vehicle or cannot drive would benefit from transit with increased mobility to the community, services, and employment.

For the year 1996, the percentages of impaired population were applied to the Census Data population numbers to obtain the break-down of population categories. Similarly, for the year 2020, the percentages were applied to

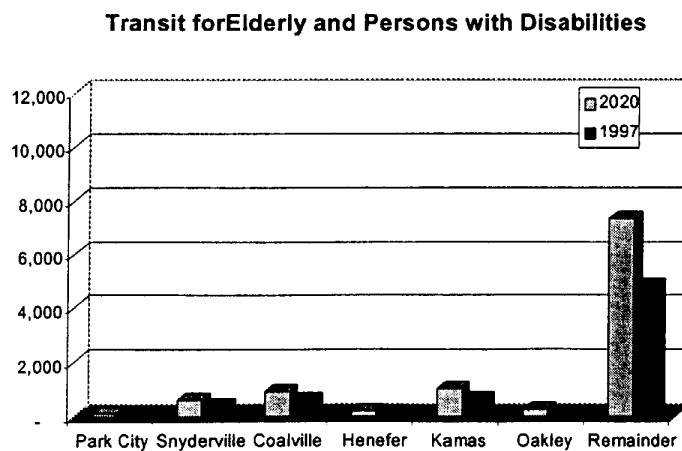
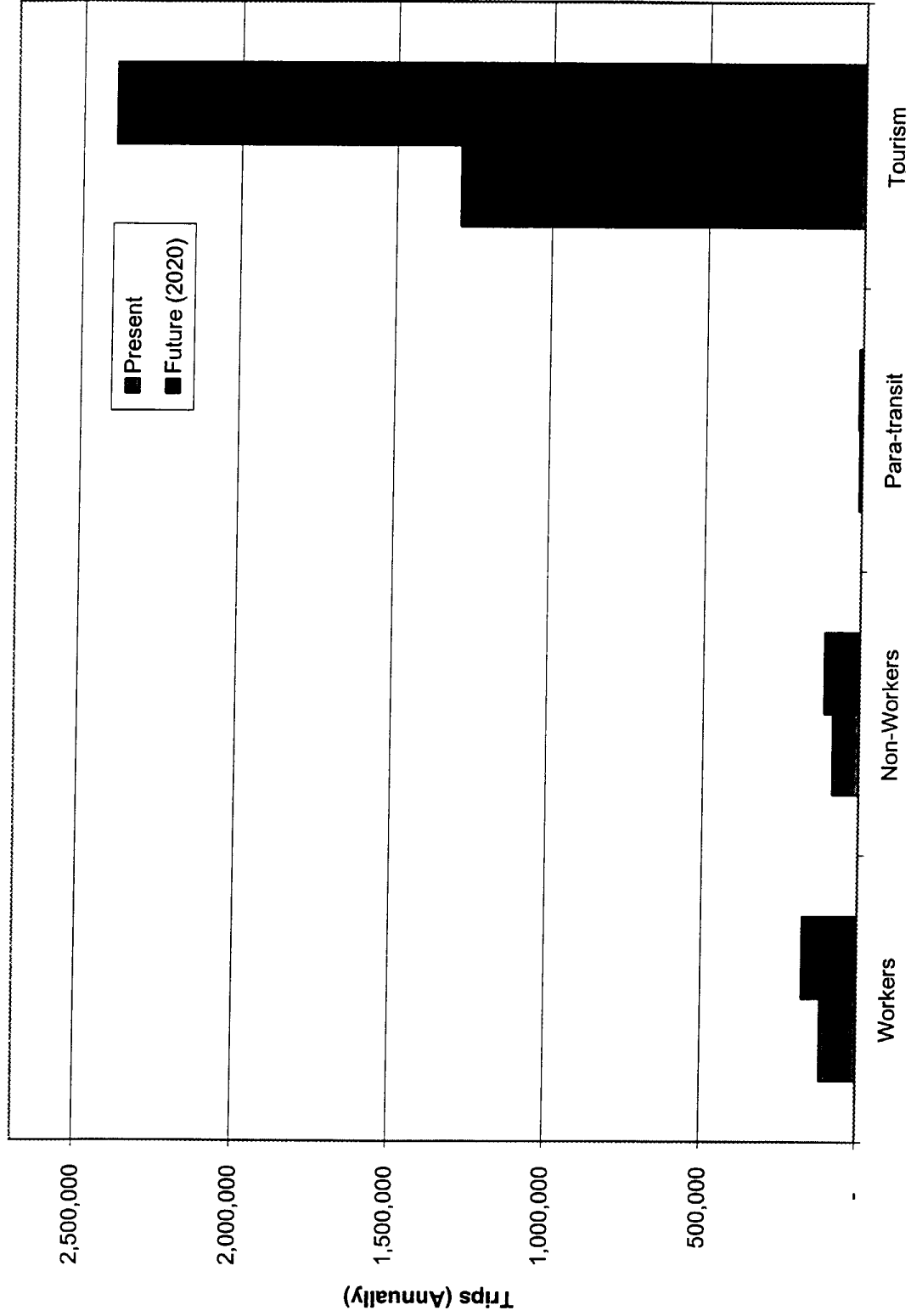


Figure 5: Persons with Disabilities

the population projections by the Governor's office of planning and budget to obtain a break-down of population segments. Trip estimation within Summit county is shown in Figure 5. A summary of demand for all groups is provided in Figure 6.

Figure 6
Demand Estimates by User Group



5. Service Alternatives

This chapter describes various service alternatives that have been developed for regional service in the Snyderville/Park City area. The basis for any transit plan is the development of an effective and appropriate service strategy. The types of service provided, the schedules and routes of the services, and the quality of service can effectively determine the success or failure of a transit organization. Based upon the service plan, capital requirements, funding requirements, and the appropriate institutional and management strategies can be determined.

The service alternatives are presented in two sections: local service and commuter service. Potential ridership on these alternatives was calculated based on estimates of demand that were developed by Fehr & Peers Associates, Inc., as discussed in another section of this report. Annual growth rates developed from the Fehr & Peers demand estimates for 1997 and 2020 were used to estimate demand in 2000. The year 2000 was used because service could not likely start before that year, and it is considered a target date for establishing a system.

A. OLD TOWN TRANSIT CENTER

Many of the Service Alternatives proposed throughout this report will be reliant upon new rider amenity additions. Park City is currently in the process of designing a significant amenity in Old Town which will be of great benefit to many service alternatives proposed in this plan. Visitor based transit service, especially links from the Canyons and the Park City Outlet Mall, will succeed if Old Town is included as a destination. The current stop offers only limited and divided transit curb space on Heber Avenue. The addition of two or more regional buses per hour during peak times, added to the already scheduled 23-19 buses per peak hour, would place significant constraints upon the existing stop at Heber Avenue. Park City is currently in a design phase of the Old Town Transit Facility which will provide a private bus way, a dedicated stop for Summit County services, as well as shelter for passengers wishing to ride an existing link on the current park City System. In addition, this critical amenity for the Summit County system will provide invaluable shelter and waiting space among other services.

B. LOCAL SERVICE ALTERNATIVES

The feasibility of transit service to the Snyderville Basin, particularly to The Canyons resort and Kimball Junction, is a regional transit concern. The following alternatives have been developed to present potential types of service between Park City and these areas.

The 224 Express

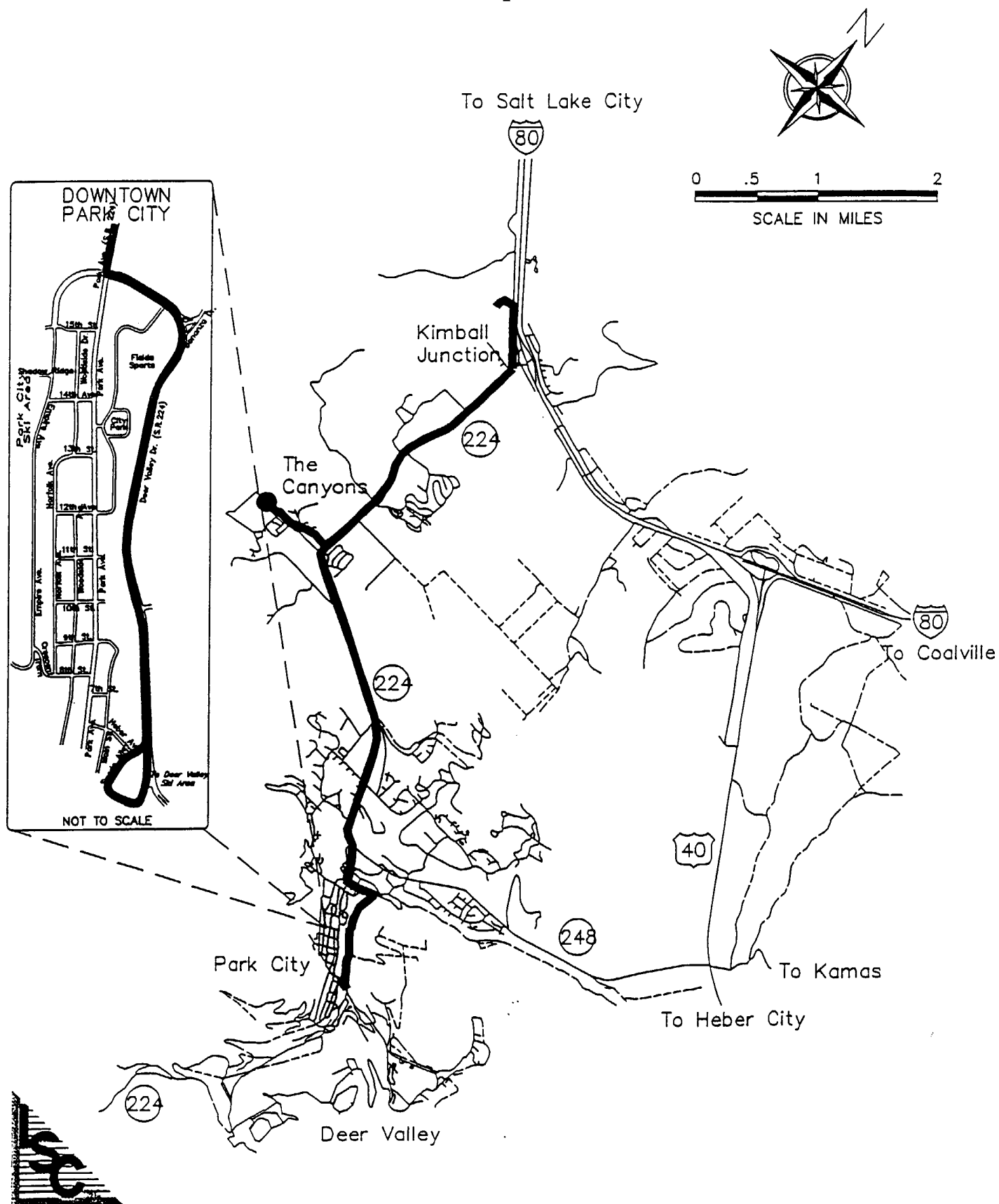
One alternative considered for this study, as illustrated in Figure 7, is the "224 Express" providing service from the Old Town Intermodal Center in Park City to The Canyons, commercial centers near the Interstate 80/State Route 224 interchange, and the Park City Factory Outlet Stores. The Express would make limited stops, and would offer hourly service with one bus. Half-hour service, utilizing two buses, would be provided during peak periods. The Express would operate from 7:00 A.M. – 11:00 P.M. in the winter and from 8:00 A.M. – 6:00 P.M. the rest of the year. A sample schedule for the 224 Express is shown in Table 5. The table shows only one morning run of each bus; the routes would, of course, continue throughout the service day.

Table 5
Sample 224 Express Schedule

Service/Stop	1st Bus	Peak 2nd Bus
Intermodal Center		
<i>Depart</i>	8:00 AM	8:30 AM
The Canyons (to Kimball Junction)		
<i>Arrive</i>	8:12 AM	8:42 AM
<i>Depart</i>	8:15 AM	8:45 AM
K-Mart		
<i>Arrive</i>	8:19 AM	8:49 AM
<i>Depart</i>	8:22 AM	8:52 AM
Park City Factory Outlet Stores		
<i>Arrive</i>	8:25 AM	8:55 AM
<i>Depart</i>	8:28 AM	8:58 AM
The Canyons (to Park City)		
<i>Arrive</i>	8:40 AM	9:10 AM
<i>Depart</i>	8:43 AM	9:13 AM
Intermodal Center		
<i>Arrive</i>	8:55 AM	9:25 AM
Schedule Repeats Throughout the Service Day		
Source: LSC, Inc.		

Potential demand for the 224 Express comprises resident non-work and work trips between Park City and the Snyderville Basin, tourist trips from Park City to The Canyons and other Snyderville Basin locations, and tourist trips that both originate and end within the Snyderville Basin. It is assumed that resident non-work trips are evenly distributed over the year. In light of data regarding tourist overnight stays in Park City by month, it is estimated that 53 percent of the demand for tourist trips and for resident work trips occurs in the winter season (November through March), and 47 percent occurs in the rest of the year. Based on these assumptions, the potential demand for the 224 Express totals approximately 128,400 one-way trips in the winter season, and approximately 115,500 one-way trips the rest of the year. Thus, the annual potential demand is estimated to total 243,900.

Figure 7
224 Express



Actual ridership on the Express (if no fare were charged) was estimated by assuming the following percentages of potential demand would materialize as ridership. Due to the relative convenience of the service for residents for travel between Park City and the Snyderville Basin, it was assumed that the service would be utilized by 90 percent of the potential resident work and non-work demand in the winter, and by 75 percent of the potential demand during the rest of the year. For tourist trips, it is estimated that, in the winter, 20 percent of the demand for travel between Park City and The Canyons would utilize the Express. (As discussed below, it is assumed that an additional 70 percent of potential demand between Park City and The Canyons would utilize The Canyons Shuttle.) It was assumed that the 224 Express would supply 70 percent of the tourist demand between Park City and The Canyons during the rest of the year (when The Canyons Shuttle is not in operation). For other tourist trips, it was assumed that the Express would supply 90 percent of the demand in the winter, and 70 percent during the rest of the year.

Under these assumptions, if no fare were charged for the service, fiscal year 2000-01 ridership on the 224 Express is estimated to total 154,500 annual one-way trips. This includes an estimated 71,100 one-way trips during the winter season, and 83,400 during the rest of the year.

If a general-public fare of \$1.00 were charged, it is estimated that ridership would decline by one-third. Thus, as shown in Table 6 (next page), ridership on the Express with a \$1.00 fare is estimated to total 103,000 annual one-way trips. A \$1.00 *general public* fare would be expected to yield an *average* fare of \$0.85, after allowing for half-fare trips for elderly persons and persons with disabilities, and for trips that are discounted due to passes. Therefore, the annual fare revenue generated by the service is estimated to total \$87,600.

The table also presents the estimated \$281,000 annual operating cost of the service (based on the estimated fiscal year 2000-01 Park City Transit administrative and operating unit cost per vehicle hour). When the estimated fare revenue of \$87,600 is subtracted from the cost, the required annual subsidy is estimated to total \$193,400. As mentioned above, the Express would also require two buses to operate.

The Canyons Shuttle

Another alternative considered for this study is "The Canyons Shuttle," which would provide service from The Canyons to several destinations, including:

- ▶ Prospector Square
- ▶ Deer Valley
- ▶ The Old Town Intermodal Center
- ▶ Park City Mountain Resort

TABLE 6: Operating Alternatives and Costs
Ridership and Cost Analysis, Fiscal Year 2000-01

Alternative	Additional Vehicles (1)	Runs per Day	Route		Total Daily		Vehicle Miles	Vehicle Hours	Operatin Days	Total Annual		Capital Costs	Total Cost	Ridership Impact		Annual Farebox Revenue	Annual Subsidy Required	Trips/ Hour	Cost/ Trip	Average Cost/Trip	Farebox Ratio
			Length (Miles)	Time (Hours)	Vehicle Miles	Vehicle Hours				Operating Cost (2)	Cost (2)			(One-Way Trips) Daily	Annual						
224 Express																					
Winter Season	2	22	17.2	1.00	380.4	22.5	57,060	3,375	150	\$146,100	\$45,000	\$191,100	320	47,400	\$0.85	40,300	\$105,800	14.0	\$3.08	\$4.03	27.6%
Other Seasons	1	14	17.2	1.00	242.8	14.5	52,202	3,118	215	\$134,900	\$22,500	\$157,400	260	55,600	\$0.85	47,300	\$87,600	17.8	\$2.43	\$2.93	35.1%
Total Year Round	2		17.2	1.00			109,262	6,493	365	\$281,000	\$45,000	\$326,000		103,000		87,600	\$193,400	15.9	\$2.73	\$3.17	31.2%
The Canyons Shuttle																					
Winter Season Only	2	20	18.0	1.00	362.0	20.5	54,300	3,075	150	\$133,100	\$45,000	\$178,100	320	47,700	\$0.00	0	\$133,100	15.5	\$2.79	\$3.73	0.0%
Kimball Junction Circulator (van - 1)																					
Winter Season	1	16	12.0	1.00	194.0	16.5	29,100	2,475	150	\$107,100	\$22,500	\$129,600	60	9,200	\$0.85	7,800	\$99,300	3.7	\$11.64	\$14.09	7.3%
Other Seasons	1	10	12.0	1.00	122.0	10.5	26,230	2,258	215	\$97,700	\$22,500	\$120,200	30	6,800	\$0.85	5,800	\$91,900	3.0	\$14.37	\$17.68	5.9%
Total Year Round	1		12.0	1.00			55,330	4,733	365	\$204,800	\$22,500	\$227,300		16,000		13,600	\$191,200	3.4	\$12.80	\$14.21	6.6%
Regional Vanpool Program (no capital)																					
Winter Season Only	5	15	12.0	1.00	182.0	15.5	27,300	2,325	150	\$70,000	\$112,500	\$182,500	80	12,000	\$1.00	12,000	\$58,000	5.2	\$5.83	\$15.21	17.1%
Subscription Service																					
Kamas & Oakley	1	4	23.0	0.75	94.0	3.5	14,100	525	150	\$13,600	\$22,500	\$36,100	50	8,000	\$1.00	8,000	\$5,600	15.2	\$1.70	\$4.51	58.8%
Coalville	1	4	24.0	0.75	98.0	3.5	14,700	525	150	\$13,600	\$22,500	\$36,100	20	2,600	\$1.00	2,600	\$11,000	5.0	\$5.23	\$13.88	19.1%
Heber City	1	4	17.0	0.75	70.0	3.5	10,500	525	150	\$13,600	\$22,500	\$36,100	80	11,300	\$1.00	11,300	\$2,300	21.5	\$1.20	\$3.19	83.1%
Total Winter Season Only	3	12	64.0	2.25	262.0	10.5	39,300	1,575	150	\$40,800	\$67,500	\$108,300	150	21,900	\$1.00	21,900	\$18,900	13.9	\$1.86	\$4.95	53.7%
Standard Fixed-Route Service																					
Kamas & Oakley	1	10	23.0	0.75	232.0	8.0	34,900	1,200	150	\$51,900	\$22,500	\$74,400	110	15,900	\$1.00	15,900	\$36,000	13.3	\$3.26	\$4.68	30.6%
Coalville	1	10	24.0	0.75	242.0	8.0	36,300	1,200	150	\$51,900	\$22,500	\$74,400	30	5,200	\$1.00	5,200	\$46,700	4.3	\$9.98	\$14.31	10.0%
Heber City	1	10	17.0	0.75	172.0	8.0	25,800	1,200	150	\$51,900	\$22,500	\$74,400	150	22,600	\$1.00	22,600	\$29,300	18.8	\$2.30	\$3.29	43.5%
Total Winter Season Only	3	30	64.0	2.25	646.0	24.0	96,900	3,600	150	\$155,700	\$67,500	\$223,200	290	43,700	\$1.00	43,700	\$112,000	12.1	\$3.56	\$5.11	28.1%
Limited Fixed-Route Service																					
Kamas & Oakley	2	4	23.0	0.75	94.0	3.5	14,100	525	150	\$22,700	\$45,000	\$67,700	80	11,900	\$1.00	11,900	\$10,800	22.7	\$1.91	\$5.69	52.4%
Coalville	2	4	24.0	0.75	98.0	3.5	14,700	525	150	\$22,700	\$45,000	\$67,700	30	3,900	\$1.00	3,900	\$18,800	7.4	\$5.82	\$17.36	17.2%
Heber City	2	4	17.0	0.75	70.0	3.5	10,500	525	150	\$22,700	\$45,000	\$67,700	110	17,000	\$1.00	17,000	\$5,700	32.4	\$1.34	\$3.98	74.9%
Total Winter Season Only	6	12	64.0	2.25	262.0	10.5	39,300	1,575	150	\$68,100	\$135,000	\$203,100	220	32,800	\$1.00	32,800	\$35,300	20.8	\$2.08	\$6.19	48.2%
Salt Lake City Route																					
	3			1.75					150	\$198,000	\$132,000	\$330,000		120,000	\$0.85			39.5	\$1.65	\$2.75	\$1.10
worker service	3			1.18					365	100,600.00	\$132,000	\$232,600		40,000	\$1.00				\$2.52	\$5.82	\$3.30

Note 1: Excluding salaries, which can only be calculated for the winter season, as above.

Note 1: Excluding spares, which can only be calculated for the system as a whole.

Note 2: Based on estimated fiscal year 2000-01 Park City Transit cost per hour.

Source: LSC, Inc.

Note 3: Bus costs are assumed at 225,000 amortized over a period of 10 years.

The Canyons Shuttle would not charge a fare. The proposed route of the Shuttle is shown in Figure 8. Service would be provided to other lodging and shopping destinations en route, as well. The Shuttle would provide half-hour service with two buses; additional buses would be added if needed to meet demand, which could further increase service frequency. The service would operate only in the winter, for seven days a week, from 8:00 A.M. to 6:00 P.M. Table 7 presents a sample schedule for The Canyons Shuttle. The table shows only one morning run of each bus; the routes would continue throughout the service day.

Table 7
Sample Canyons Shuttle Schedule

Service/Stop	1st Bus	2nd Bus
The Canyons - Depart	8:00 AM	8:30 AM
Prospector Square	8:12 AM	8:42 AM
Intermodal Center - Arrive	8:17 AM	8:47 AM
Intermodal Center - Depart	8:22 AM	8:52 AM
Deer Valley	8:32 AM	9:02 AM
Park City Mountain Resort	8:43 AM	9:13 AM
The Canyons - Arrive	8:55 AM	9:25 AM
Schedule Repeats Throughout the Service Day		
Source: LSC, Inc.		SC Utah Alternatives.wb3

Potential demand for the Shuttle would consist largely of winter season tourist trips between Park City and The Canyons. This potential demand totals an estimated 68,200 trips in the winter of 2000-01, based on the assumption that 53 percent of the annual demand occurs from November through March. As mentioned above, it is assumed that 70 percent of this demand would be supplied by The Canyons Shuttle (another 20 percent would be met by the 224 Express, as discussed above). Thus, as shown in Table 6, it is estimated that the Shuttle would provide 47,700 one-way trips in the 2000-01 winter season. The table also presents the estimated operating cost of \$133,100 for the season. The service would require two buses, as discussed above.

The Kimball Junction Circulator

A "Kimball Junction Circulator" serving the rapidly developing neighborhoods near the junction of I-80 and 224 was developed for this study, and is presented in Figure 9. The alternative would operate as a checkpoint-deviation service with specific stops that would

Figure8
Canyons Shuttle

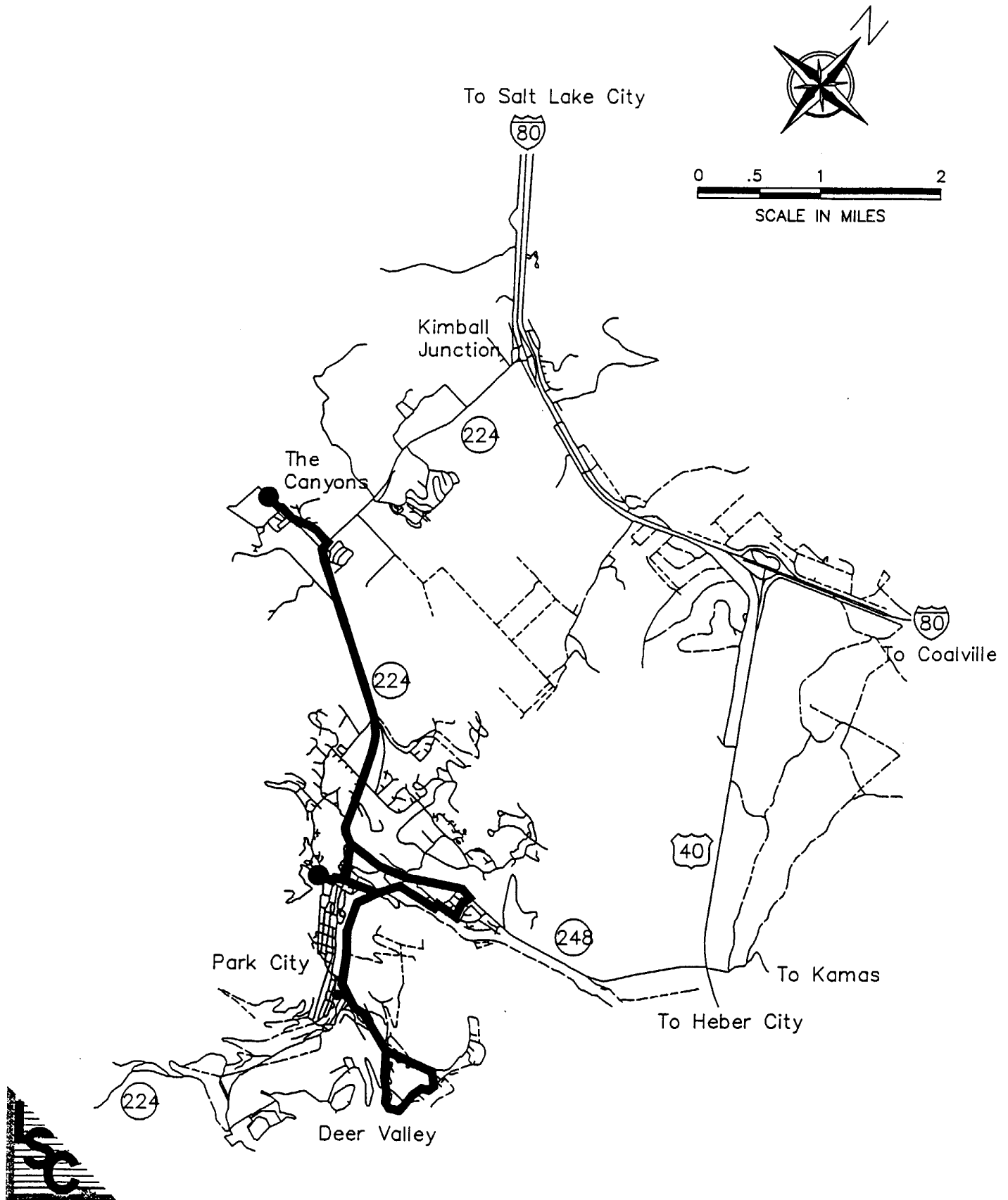
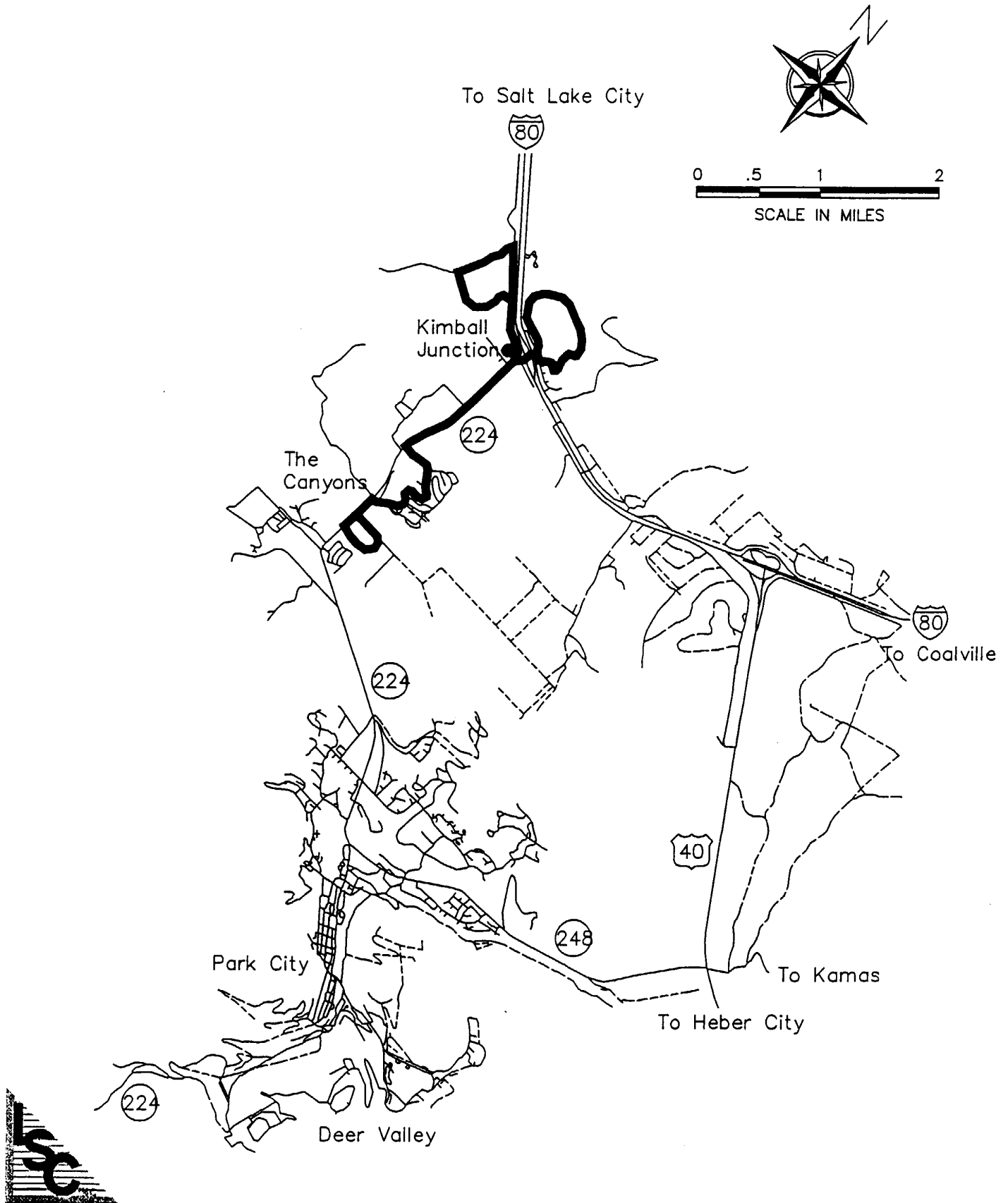


Figure9
Kimball Junction Circulator



be served at designated times. Between these points, the Circulator would provide service in a demand-response, curb-to-curb mode as required to meet passenger needs. A service of this type will meet the Americans With Disabilities Act requirement for complementary demand-response service. The Circulator, which would operate on an hourly headway with one vehicle, would consist of three short loops, as follows:

- ▶ The "North Shore" and "South Shore" neighborhoods south of Kimball Junction.
- ▶ The neighborhood north of Kimball Junction along Bitner Road.
- ▶ The commercial area west of Kimball Junction, including the Park City Factory Outlet Stores.

There would be opportunities to transfer to the 224 Express (described above) at the Park City Factory Outlet Stores, and near the K-Mart. The service could be extended to other neighborhoods in the area (e.g., Jeremy Ranch, Pinebrook) as demand justifies. It is estimated that, with route deviations, the south loop would require 30 minutes, the north loop would need 18 minutes, and the west commercial loop would require 12 minutes. The length of the route, including deviations, is estimated to total an average of 12 miles. The Circulator would operate from 7:00 A.M. – 11:00 P.M. in the winter and from 8:00 A.M. – 6:00 P.M. the rest of the year (the same hours as the 224 Express).

The potential demand for the Circulator includes the resident demand for work and non-work trips from Park City to the Snyderville Basin, as well as those trips that have both origins and destinations within the Snyderville Basin. Because most of these trips would require the rider to transfer from the Circulator to the 224 Express, the actual ridership is estimated to be less than for services that do not require a transfer. With a general public fare of \$1.00, it is assumed that 75 percent of the potential demand would be realized as ridership in the winter, and 50 percent would be realized during the rest of the year. Under these assumptions, as shown in Table 6, annual ridership would total an estimated 16,000 one-way trips, including 9,200 in the winter season and 6,800 during the rest of the year.

The annual operating cost of the service is estimated to total \$204,800, as the table shows. The ridership estimated above would generate an estimated \$13,600 in fare revenue (with an average fare of \$0.85), leaving an additional \$191,200 in annual subsidy required. The Circulator would require the purchase of one vehicle as well.

B. COMMUTER SERVICE ALTERNATIVES

Data from the Utah Department of Workforce Service indicate that, in the first six months of 1998, daily Park City non-farm employment averaged approximately 12,400 persons. In 1990, according to the U.S. Census, 77 percent of Park City employees resided elsewhere. The 1990 Census further reported that 70 percent of the out-of-town employees drove alone to work, and 28 percent carpooled. (Two percent used another means of transportation.) The application of these percentages to the 1998 Park City workforce suggests that approximately 9,500 Park City employees resided elsewhere in

1998, that a daily average of 6,700 out-of-town commuters drove alone to Park City employment locations, and that a daily average of 2,700 carpooled. Assuming one vehicle each for those who drove alone, and assuming an average of 2.1 persons per car for those who carpool, these commuters brought approximately 8,000 vehicles daily into Park City.

These estimates suggest that the potential transit market for out-of-town commuters is significant. However, it is not feasible to serve all of the widely-distributed residence locations of these workers. Three feasible commuter service corridors were analyzed for this study, and are presented in Figures 10 through 12. Various types of service were considered for each of these corridors during the winter season (from November through March), as discussed below. A \$1.00 fare per one-way trip is assumed for all of the service types. The potential commuter service corridors included in the study are:

- ▶ **Service to Kamas, continuing to Oakley.** The distance from Park City to Kamas is 18 miles, and from Park City to Oakley is a distance of 23 miles. The number of commuters in 2000 was estimated by applying the annual growth rate in Summit County employment to the number of commuters in 1990. This methodology resulted in an estimate of 1,063 commuters to Park City from Kamas and Oakley in 2000.
- ▶ **Service to Coalville.** The distance from Park City to Coalville, the Summit County seat, is 24 miles. Under the methodology described above, it is estimated that there will be 347 persons commuting from Coalville to Park City in 2000.
- ▶ **Service to Heber City.** Park City to Heber City is a distance of 17 miles. The methodology described above leads to an estimate of 1,504 commuters from Heber City to Park City in the year 2000. Because Heber City is located in Wasatch County, outside of Summit County, there may be institutional barriers to overcome in providing service on this corridor.

Service to Salt Lake County was also considered, and is discussed following the analysis of various services to the three corridors defined above.

Regional Vanpool Program

A vanpool program can be a relatively cost-effective means of providing public transportation for commuters. Advantages of a vanpool program include the fact that drivers are essentially unpaid, and that the program is relatively flexible in that it allows a range of trip origins and destinations. A program sufficient to meet the demand in the three corridors mentioned above would be expected to require five vans. A vanpool program contracted through a company such as Van Pool Services, Inc. (VPSI), which provides the vehicles on a lease basis, requires the public sector only to subsidize fares in order to ensure that adequate ridership is generated.

Figure 10
Commuter Service Option
Park City to Kamas and Oakley

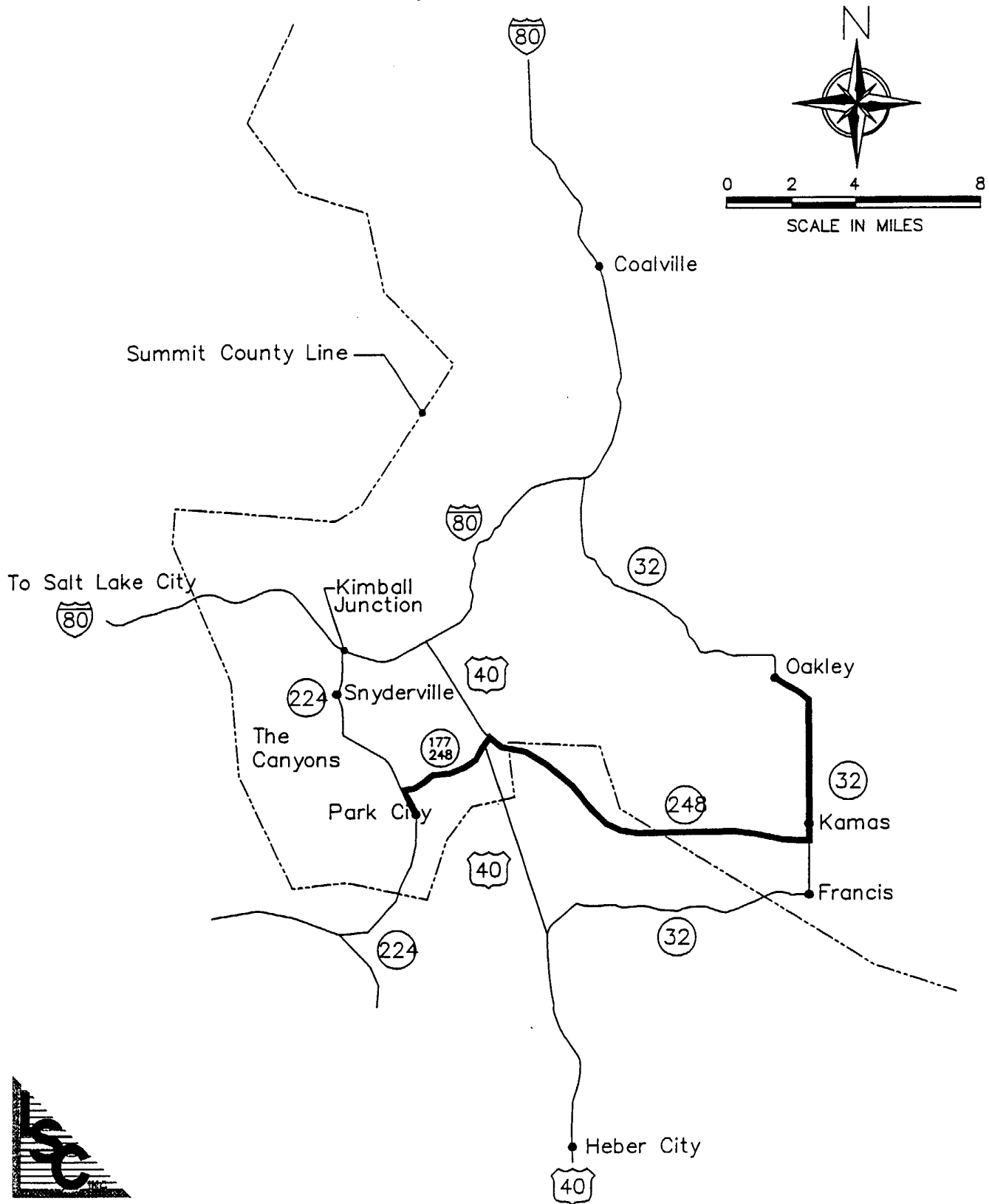


Figure 11
Commuter Service Option
Park City to Heber City

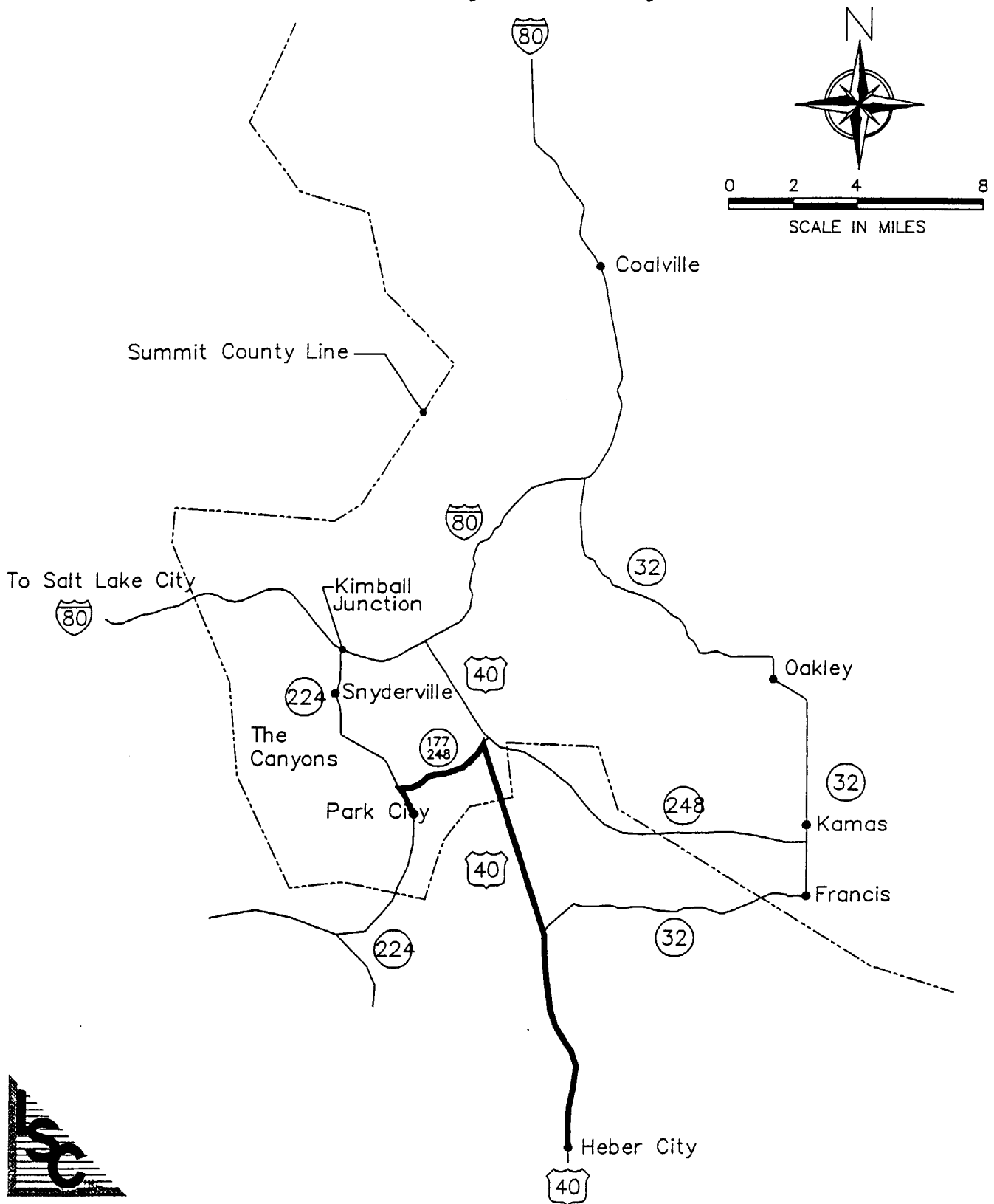
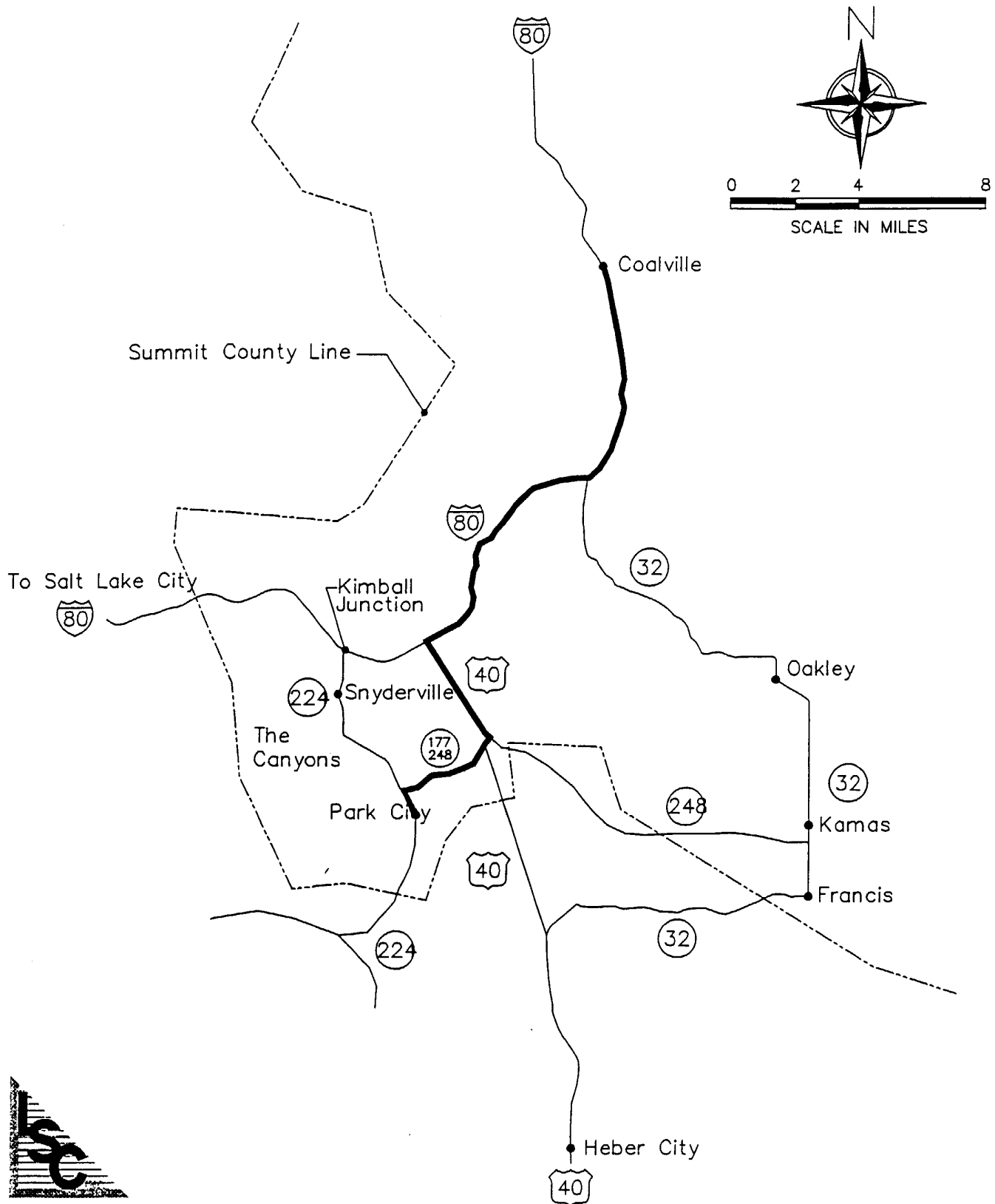


Figure 12
Commuter Service Option
Coalville to Park City



As shown in Table 2, the operating cost for a program comprising five vans would be expected to total on the order of \$70,000 annually. Because the vehicle lease costs are included in the operating costs, no additional capital costs would be incurred. Marketing is key to the success of a vanpool program. With adequate marketing, each vanpool would be expected to attract a minimum of eight daily participants. Thus, a program of five vans would be expected to generate at least 80 one-way trips per day, for a winter season total of 12,000 one-way trips. A fare per one-way trip of \$1.00 would generate fare revenue of \$12,000, reducing the operating subsidy requirement to \$58,000.

Subscription Service

Another option for providing commuter service, similar to a vanpool program, is through a subscription bus service. Riders would pay the fare for such a service in advance, by the week or month. Passengers would be picked up at one or more park-and-ride locations. (Often, an agreement is possible with a local church or other organization to use their parking lot for a park-and-ride location.) One advantage of a subscription service is that the level of service required is known in advance, as the seats are paid for prior to the service.

A service of this type would provide one round-trip of revenue service per day in each commute corridor. The buses would leave the city of origin for Park City around 7:00 A.M., and would leave Park City for the return trip around 5:00 P.M. The buses would be left overnight in the community of origin, after agreements are finalized with the municipality or county to provide secure parking and emergency maintenance services. An advantage to service of this type is that it can be operated with few deadhead miles and hours required, which will minimize the operating cost of the service. In addition, it may be possible to arrange for a volunteer driver, who would get free transportation in exchange for driving the vehicle.

The estimated ridership for the service was developed based on the estimated 2,914 commuters in the three corridors in 2000, as described above. It is estimated that these commuters would make a total of 874,300 one-way trips in the winter season from November through March. Given the limited service available on the subscription service, it is assumed that 2.5 percent of these trips would be made on the commute service. Thus, the service would provide an estimated 21,900 trips in the 2000-01 winter season, as shown in Table 6. Of these trips, 8,000 would be in the Kamas/Oakley corridor, 2,600 would be in the Coalville corridor, and 11,300 would be in the Heber City corridor. It is estimated that the operating cost of the service would total \$40,800 for the year, assuming that volunteer drivers were utilized for the service. A one-way fare of \$1.00 would generate \$21,900 in fare revenue annually, reducing the annual operating subsidy required to an estimated \$18,900. If discounted passes were available, the fare revenue would decrease slightly. This service would require one bus for each commute corridor served.

Standard Fixed-Route Service

Another alternative for providing commuter service in the area is standard fixed-route service. Service of this type would comprise two A.M. peak runs (leaving the city of origin for Park City at 7:00 A.M. and 8:00 A.M.) and two P.M. peak runs (leaving Park City for the city of origin at 5:00 P.M. and 6:00 P.M.). The service would include one midday run as well, to allow half-day trips. The buses would remain in Park City overnight, resulting in lengthy deadhead runs preceding the first morning trip to Park City and following the final afternoon run.

The estimated total number of commute trips in the three corridors in the winter season is 874,300, as described above. Because standard fixed-route service is much more flexible than the subscription service, it is estimated that the transit mode split would be double that for the subscription service, or 5.0 percent. As Table 6 shows, this would lead to a total of approximately 43,700 one-way transit trips annually. The total operating cost of the service is estimated at \$155,700 annually. A one-way fare of \$1.00, generating \$43,700, would reduce the annual operating subsidy required to \$112,000. Again, the provision of discounted passes would lead to a slight reduction in fare revenue. As with the subscription service, standard fixed-route service would require one bus for each commute corridor served.

Limited Fixed-Route Service

A final alternative for providing commuter service is through a limited fixed-route service. Under this alternative, two buses in each corridor would provide one round-trip each per day of revenue service. The service would consist of two A.M. peak runs, leaving the city of origin for Park City at 7:00 A.M. and 8:00 A.M., and two P.M. peak runs, leaving Park City for the city of origin at 5:00 P.M. and 6:00 P.M. As with the subscription service, the buses would be left overnight in the city of origin. This would minimize the deadhead miles and hours, thus minimizing the operating cost of the service.

As described above, the total number of one-way winter-season commuter trips in the three corridors is estimated at 874,300. Because a limited fixed-route service would not offer the mid-day service provided by the standard fixed-route service described above, the ridership would be lower. It is estimated that the ridership on a limited fixed-route service would be 75 percent that of the standard service, or 32,800 annual one-way trips, as shown in Table 6. It is estimated that the annual operating cost of the service would total \$68,100, as presented in the table. A fare of \$1.00 per one-way trip would generate \$32,800 in fare revenue (if no discounted passes were available), lowering the operating subsidy required to \$35,300. Because the buses would make only one round trip per day, each corridor served would require two buses.

C. SALT LAKE COUNTY SERVICE

Services to Salt Lake County are not the primary focus of this study. However, two potential services to the County were analyzed and are discussed below. It should be noted that service to Salt Lake County does not consider multiple locations. Further study is required to consider Salt Lake service.

Winter Tourist Service

One potential alternative is a winter-season tourist service. Such a service would require three buses, and would provide ten round trips per day between Park City and Salt Lake County. The potential ridership on a service of this type is relatively high; it is estimated that the potential ridership level is 120,000 annual one-way trips. However, actually achieving this level of ridership would require a high level of service, including buses with passenger amenities that would be attractive to tourists with travel options. It would also require an active and sustained marketing program.

The operating cost of the service is estimated at \$198,000 annually. With an average fare of \$0.85 (as discussed above), the service would generate annual farebox revenue of \$102,000, leaving an annual operating subsidy requirement of \$96,000.

Winter Commuter Service

A winter-season commuter service from Salt Lake County to Park City was also analyzed for the study. The service would provide five round trips per day utilizing three buses. The potential annual ridership is estimated at 40,000 one-way trips; however, the extremely dispersed residences of Salt Lake County residents who work in Park City means that it would be very problematic to arrange a service that would be useful to the majority of these potential riders.

It is estimated that the administrative and operating cost of the service would total \$100,600 annually. If the full potential ridership of 40,000 one-way trips annually were realized, the service would generate a corresponding \$40,000 in annual farebox revenue (assuming a \$1.00 one-way fare). This would leave an annual operating subsidy requirement of \$60,600.

D. COMPARISON OF SERVICE ALTERNATIVES

Table 8 and Figures 13 through 17 presents a series of "performance indicators" for the various service alternatives discussed above. Taken together, these measures can assist in making informed decisions about which of the alternatives are likely to be the most effective and efficient.

Table 8
Service Alternatives Performance Analysis
Fiscal Year 2000-01

Alternative	Annual Marginal Change in		Pass. Trips per Vehicle Hour	Marginal		
	Passenger- Trips	Oper. Subsidy Required		Operating Cost per Pass. Trip	Operating Subsidy per Pass. Trip	Operating Farebox Ratio
224 Express						
Total Year Round	103,000	\$193,400	15.9	\$2.73	\$1.88	31.2%
The Canyons Shuttle						
Total Winter Only	47,700	\$133,100	15.5	\$2.79	\$2.79	0.0%
Kimball Junction Circulator						
Total Year Round	16,000	\$191,200	3.4	\$12.80	\$11.95	6.6%
Regional Vanpool Program						
Total Winter Only	12,000	\$58,000	5.2	\$5.83	\$4.83	17.1%
Subscription Service						
Total Winter Only	21,900	\$18,900	13.9	\$1.86	\$0.86	53.7%
Standard Fixed-Route Service						
Total Winter Only	43,700	\$112,000	12.1	\$3.56	\$2.56	28.1%
Limited Fixed-Route Service						
Total Winter Only	32,800	\$35,300	20.8	\$2.08	\$1.08	48.2%
Salt Lake County Tourist Service						
Total Winter Only	120,000	\$96,000	26.2	\$1.65	\$0.80	51.5%
Salt Lake County Commuter Service						
Total Winter Only	40,000	\$60,600	36.6	\$1.18	\$0.18	37.5%
Source: LSC, Inc.						

The ridership impact of the various alternatives, as measured in marginal passenger-trips per year, is presented in Figure 13. As shown, the Salt Lake County tourist service has the greatest potential to increase ridership, 120,000 passenger-trips per year. However, as discussed above, achieving this ridership would require a high level of service. The 224 Express also has a high potential to increase ridership, at 103,000 passenger-trips per year. The Express is followed by The Canyons Shuttle, at 47,700 passenger-trips annually. The range of ridership impact across the alternatives is quite wide, and other factors must be considered along with this measure before deciding which alternatives are the most advantageous.

FIGURE 13: Marginal Annual
Ridership by Alternative

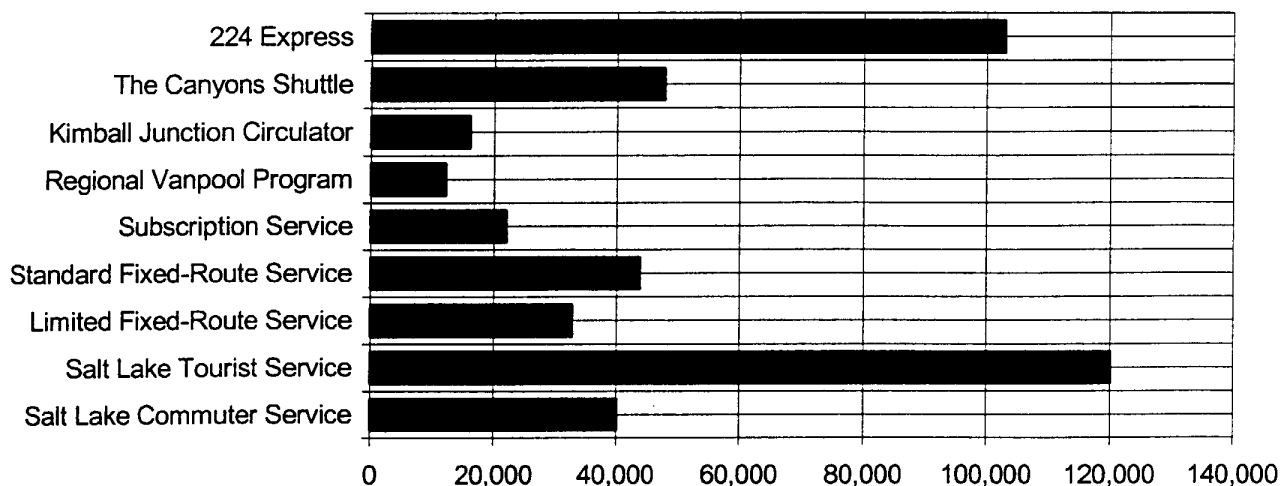


FIGURE 14: Marginal Passenger-Trips
per Vehicle-Hour

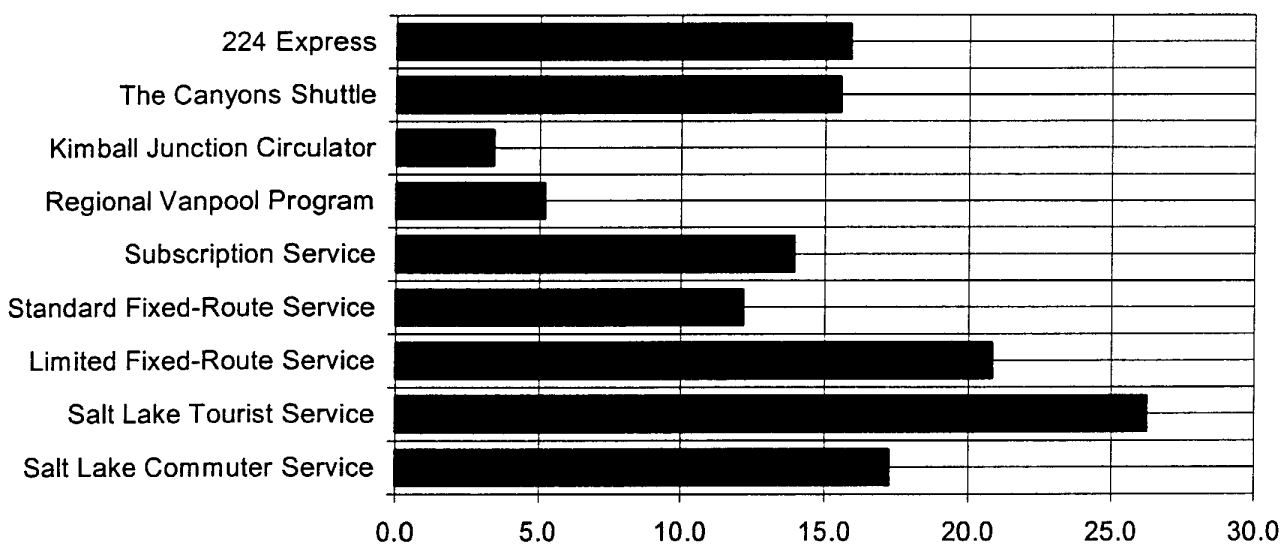


FIGURE 15: Marginal Annual
Operating Subsidy by Alternative

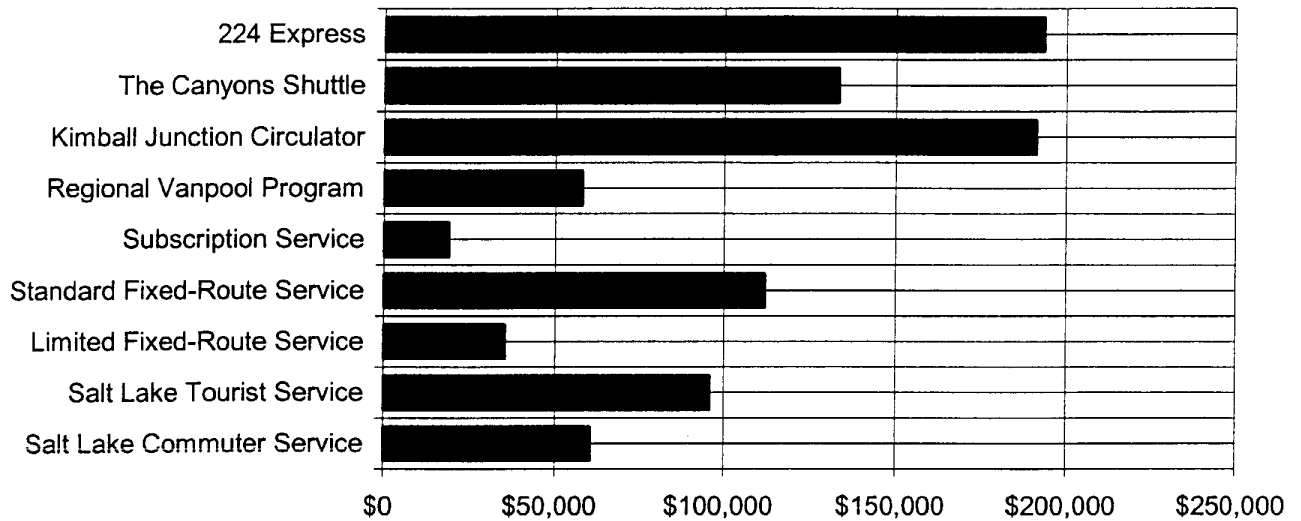
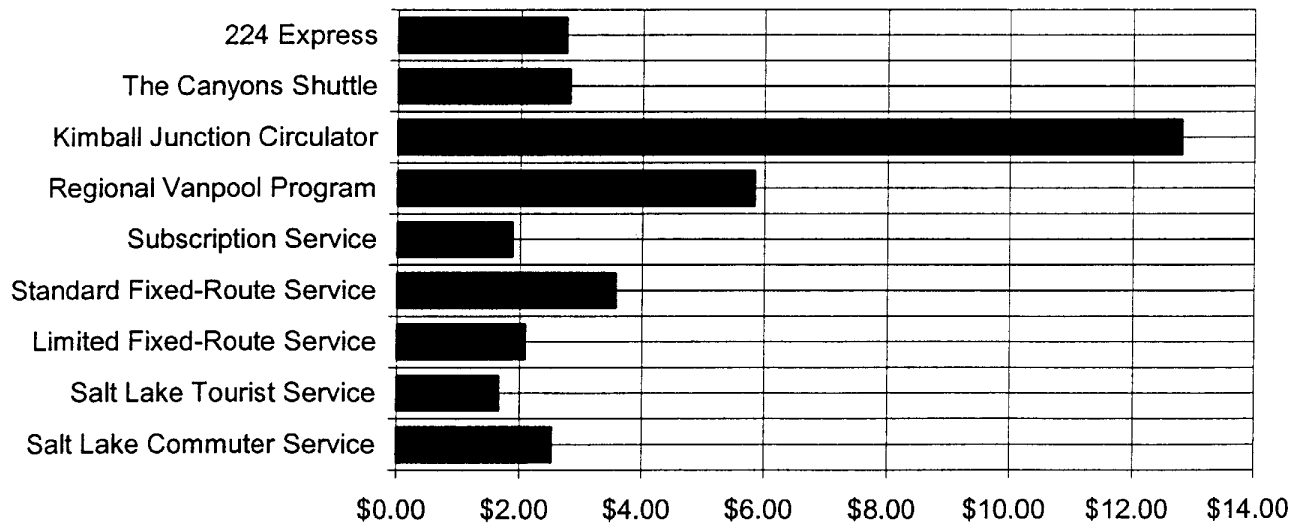
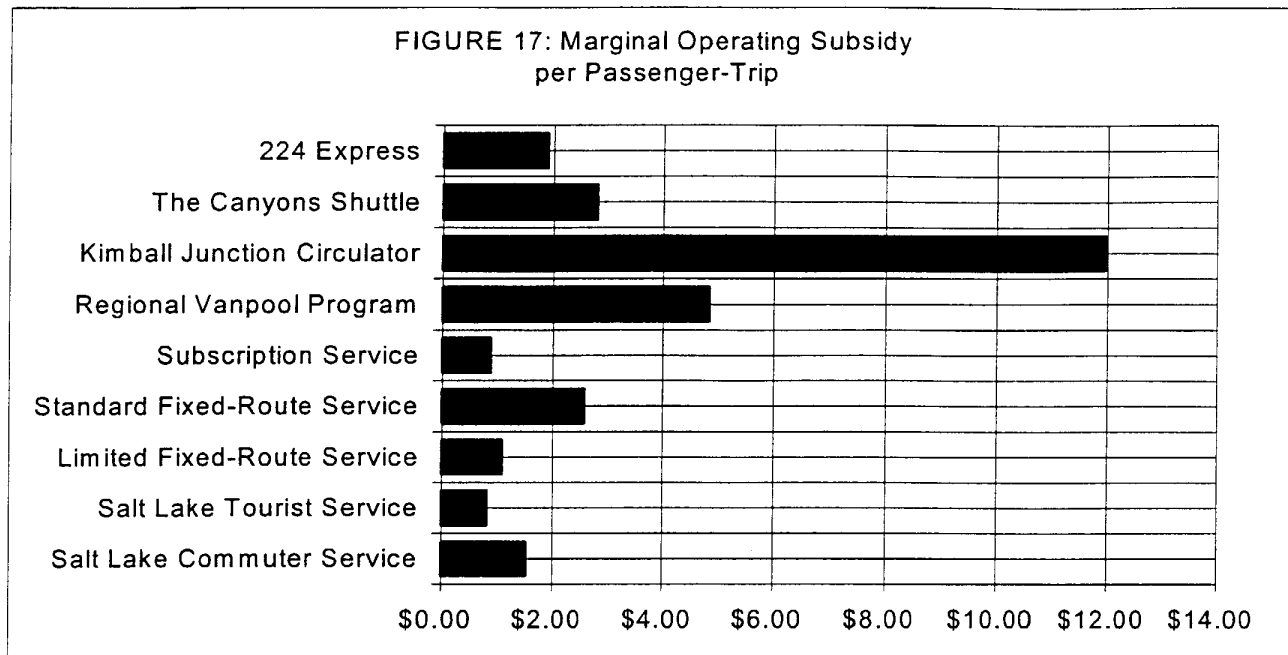


FIGURE 16: Marginal Operating Cost
per Passenger-Trip





The operating effectiveness of the alternatives, measured in terms of marginal passenger-trips per vehicle-hour, is depicted in Figure 14. As can be seen, Salt Lake Tourist Service and the Limited Fixed Route Service are the most effective by this measure, assuming the high level of potential ridership can be achieved. Next is the 224 Express and the Salt Lake Commuter Service. The Canyons Shuttle is also quite productive.

Total required marginal change in operating subsidy, a very straightforward financial comparison of these alternatives, is presented for the various alternatives in Figure 15. As indicated, the 224 Express has the highest total subsidy, at \$193,400, followed closely by the Kimball Junction Circulator, estimated to total \$191,200 annually in subsidy requirement.

An overall assessment of financial impact also requires consideration of capital needs. The greatest increase in fleet size would be for limited fixed-route commuter service, which would require six vehicles. Subscription commute service and standard fixed-route commuter service would each require 3 additional vehicles. Either of the two Salt Lake County services would require three additional vehicles. The 224 Express and The Canyons Shuttle would each require two vehicles, while the Kimball Junction Circulator would require one. The cost of leasing five vehicles for the vanpool program is included in the operating expenses for the service.

Figure 16 presents the marginal operating cost per passenger trip for the alternatives. The most expensive per-passenger-trip alternative by far is the Kimball Junction Circulator, at \$12.80 per trip. The regional vanpool service would be the next most expensive service

on a per-trip basis, costing \$5.83 per trip. However, it is important to note that the vanpool program would not incur any capital costs. The other alternatives would each cost between \$1.00 and \$4.00 per trip to provide.

Presented in Figure 17 is the marginal operating subsidy per passenger trip for the alternatives. This "performance indicator" is probably the single best means of measuring transit alternatives, as it directly relates the goal of public transportation (to provide passenger-trips) to the basic resource required (public dollars). As indicated in this figure, the Salt Lake Tourist services are the least expensive by this measure, assuming the high potential ridership can be achieved. Subscription Commuter service is the next least expensive by this measure, with a per-trip subsidy requirement of less than \$1.00. By far the most costly alternative on a subsidy-per-trip basis is the Kimball Junction Circulator, at \$11.95 per trip.

As shown in Table 8 and Figures 13 through 17, the advantages and disadvantages of each alternative differ substantially. These performance indicators should be studied carefully before deciding which, if any, of these service alternatives should be implemented in the short term or the long term. The relative effectiveness of each service should be weighed against its ability to help to achieve the goals of the transit service, and against funding limitations.

6. Evaluating Public and Political Response

As part of the process to identify issues, key political leaders were contacted and asked to give their views on the role of transit in the Summit County area. In order to capture the varied opinions throughout the different governing bodies of Summit County, the Park City Council, Snyderville Basin Planning Commission, as well as the Wasatch County Commissioners were each contacted for their response. Questions were aimed at fleshing out issues, identifying the need for transit, how transit should be implemented, and how it might be paid for. There were no responses from Wasatch County Commissioners.

A. SNYDERVILLE BASIN PLANNING COMMISSION

Bruce Taylor and Dave Allen of the Snyderville Basin Planning Commission responded to the questionnaire.

Important Issues Facing Summit County

Major issues affecting the County include loss of open space, too many homes and people, water issues, and increased traffic. If utilized, public transit could help solve some of these issues. A second point illustrated how transit could possible bridge the distance between “people places” and de-emphasize automobile use.

Need for Public Transit

While one Commissioner said that services would be best provided between Park City and Kimball Junction, the other cited service between Salt Lake City and Park City as a priority, with additional service provided between high density areas such as Kimball Junction and ski resorts.

Attitude Toward Phasing the Project

Both Commissioners believe that phasing the project is a good option, as long as there is a benchmark service in place.

Beneficiaries of Transit

Workers, non-drivers, and people with low incomes were cited as the greatest benefactors of transit. Also, where parking is limited would also be well served by transit.

Paying for Transit

Responses differed on how transit should be paid for. While one Commissioner believes that user participation and business license tax support would be best, the other believes that those who generate the need, such as resorts, should pay. Some funding by residents may be acceptable, however the type of funding was not identified.

Transit Priorities

A priority for transit should be to provide services between Kimball Junction and Park City, with a lower priority for services between Kimball Junction and Jeremy Ranch, Pinebrook, Summit Park, Highland Estates and Silver Creek.

B. PARK CITY COUNCIL

Respondents from Park City Council include Chuck Klingenstein, Paul Sincock, Roger Harlan, Shauna Kerr and Hugh Daniels.

Important Issues Facing Summit County

Growth was the single most cited problem in the Park City area. Specifically, the following were cited as major problems with growth:

- ♦ Cars and congestion
- ♦ Dispersal of homes, commercial, and recreation
- ♦ Traffic
- ♦ Congestion on other resources such as playing fields, trails etc...
- ♦ Quality of life
- ♦ Water
- ♦ County services including library, police, road maintenance
- ♦ A diversifying community

Need for Public Transit

Most council members agree that service is needed to outlying areas such as Kimball Junction and Snyderville Basin. The following responses were recorded:

- ♦ Service to Kimball Junction should be first and should be designed for tourists with benefit for the residents.
- ♦ Options for more carpooling or vanpooling.
- ♦ Although there is a perceived need, there isn't necessarily a real need. If transit were provided it would be most convenient for school aged kids. Satellite parking could create additional ridership.
- ♦ There is a need for a resort connection as well as a "down valley" employee service. There should be access for people with no cars to medical, county and shopping needs outside Park City.
- ♦ Low income workers living outside of Park City as well as people in Snyderville basin need service.

Attitude Towards Phasing

All members of City Council support a phased implementation, following a "don't bite off more than you can chew" mentality.

Beneficiaries of Transit

There was a range of emphasis when discussing who would benefit most from transit service. The most commonly cited response was low income families and employees, however the following were also cited:

- ♦ Tourists
- ♦ Workers

- ♦ School aged children and parents of school aged children
- ♦ Low income families
- ♦ Students

Paying for Transit

Although all responding council members agree that funding will not likely come from Park City or Park City residents, they disagree on where it should come from. Following are the responses:

- ♦ Grants and business fees
- ♦ Transit tax, employer contributions and beneficiaries contributions, low fares
- ♦ Tax levees
- ♦ Transit sales tax
- ♦ Business tax on Snyderville Basin businesses

Priorities for Implementation

Each council member cited different priorities for implementing transit. One set of phases discussed was beginning with Park City to The Canyons and Kimball Junction, second a Basin Loop according to population concentration, and third to the East side of the county and Wasatch County. A second set of priorities was to provide a Kimball Junction extension of existing service, provide service to apartments and condos, serve park and ride lots, and begin a carpool/vanpool arrangement. A third set of priorities is to connect to Kimball Junction with reasonable access from housing. Another priority cited was a single route from Rasmussen Road, Jeremy Ranch, Outlet malls, Kimball Junction, The Canyons to park City and back. A last set of priorities requested frequent reliable service with attractive equipment and good pick-up locations.

C. MAYOR OF OAKLEY

Doug Evans, Mayor of Oakley, responded to the questionnaire.

Important Issues Facing Summit County

Quality growth and the proper implementation of public infrastructure to support it was the major growth issue cited. Transit can play a key role in this growth.

Need for Public Transit

Transit is needed mainly for commuters in Western Summit County. The need for public transit is a direct result of the lack of affordable housing near jobs.

Attitude Toward Phasing the Project

A phased approach would be supported.

Beneficiaries of Transit

Western Summit County would benefit most initially, however over time Eastern Summit County would also see the benefit.

Paying for Transit

A combination of taxes and fees was suggested, however the Mayor feels that the residents of Oakley would not support transit at this time. Education would be needed in the future for support.

Transit Priorities

A priority for transit should be service between Western Summit County and the Wasatch Front. In five years, Eastern Summit County would be a much higher priority.

D. MAYOR OF COALVILLE

Merlyn W. Johnson, Mayor of Coalville, responded the questionnaire.

Important Issues Facing Summit County

Growth and the preservation of open spaces was cited as the top concern.

Need for Public Transit

At the present time, there is not enough demand for public transit to warrant it.

Beneficiaries of Transit

Commuters and the elderly would be the greatest beneficiaries of transit.

Paying for Transit

Transit should be paid for by those who use the system.

E. PUBLIC COMMENTS

An open house was held on September 12th at the Burns Fire Station in Snyderville Basin. The purpose of the open house was to show the progress of the study and to gain feedback from residents. A total of 14 people attended the meeting. In addition to the meeting, radio interviews were conducted with the consultant staff as well as County staff.

A user survey was distributed at the public open house and the public library. The survey was aimed at gaining input from citizens about travel patterns, desirability of transit service, and the types of transit service the public thought would be most effective. A total of 24 responses have been received to date.

Residence

Of the 36 respondents, over half reside in Park City (62%), with approximately 17% from Salt Lake City and an additional 8 percent from Heber City. The remaining respondents were distributed between Kimball Junction, Ogden and Snyderville Basin.

Place of Work

Sixty-five percent of respondents work in Park City, with 9% of respondents working at The Canyons. It is likely that several of 24 surveys were distributed at The Canyons ski area. the remaining respondents are distributed in Salt Lake, Summit and Wasatch Counties.

Use of Transit

Fifty percent of all respondents said they would use transit for work purposes. 64% said they would use it for recreation. Several respondents cited both trip purposes. 25% of respondents said they would use transit daily 41% said they would use transit weekly, and the remainder would use it either monthly or rarely.

Paying for Transit

Eighty-six percent of respondents would pay a fare to use transit.

Areas transit should serve

The following suggestions were received from the public:

- ♦ Ogden and back through Highway 84
- ♦ Coalville, Kamas, Heber. SLC
- ♦ E/W on I-80, Parleys summit to Coalville, 224, to Deer Valley
- ♦ Jeremy Ranch, Pinebrook (2)
- ♦ Kimball Jct. To Park City (7)
- ♦ Salt Lake to Park City (10)
- ♦ Snyderville Basin, Peoa, Park West

7. Transit Friendly Design Features

The development of a successful transit system in Summit County is reliant on both the quality of the transit service provided as well as the ability of government and new development to create an atmosphere which supports mass transit. Since service demands and characteristics are provided in the bulk of the analysis of the feasibility of providing mass transit throughout the Summit County region, this section is dedicated to the development of design and planning issues which compliment the actions and services of a transit provider to make mass transit successful and useful. Many of these design elements are found in the historic areas of Park City, and contribute to the overall success of the Park City Transit Authority. These design elements are highlighted to assist the remainder of Summit County achieve similar success with mass transit.

To best support mass transit, new development must incorporate several urban design features which foster pedestrian activity. Pedestrian friendly features are inherently transit friendly since virtually all transit users are pedestrians at one or both ends of their trips. For this reason, the support of transit, pedestrian activity, and street life are terms used interchangeably and all foster design features which support mass transit. The design features included in this section are taken largely from those provided for the Florida Department of Transportation and published by the American Planning Association. Pedestrian and Transit-Friendly Design: A Primer for Smart Growth, by Reid Ewing, should be reviewed for a full documentation of this report and related references. The design features discussed are also referenced in a variety of related planning topics centering around "neo-traditional" development, "new-urbanism," or other trendy terms to denote a return to the days when the automobile was less of a dominant design element in housing and development. Various sources exist for more detail on individual topics and design elements.

Transit friendly design features can be placed into three classes. Although these classes are not separated by hard divisions, the separations help to support the priority of choices that must be made by developers, local governments, and transit operators in supporting transit friendly design. Table 9 summarizes these classes and the design features included within each class. Further discussion of these classes and each design feature within them is provided in the remaining part of this section.

Essential Design Features

Many of the 23 design features identified in this section have been deemed critical to the success of transit. Yet, various examples exist of successful transit systems which do not include the full extent of these design features. Therefore, this section identifies the most important features of success for transit friendly development. Although listed as essential, these features probably contribute most to transit friendly development and should be considered as the highest priority when evaluating trade-offs and competing interests.

1. Medium to High Densities

The provision of various services such as jobs or shopping in close proximity to residential areas creates the opportunities and incentives for pedestrian activity. While the apparent desire to mix land uses may appear counter to active zoning requirements in many areas, which attempt to separate uses, the intent of creating compatible uses from a pedestrian scale is similar to the intent of traditional zoning. Mixing land uses will also allow for more balanced peak demand (compared with off-peak demand) which provides a more efficient use of transit operating and capital costs.

3. Short to Medium Block Lengths

Studies have shown that the propensity of walking increases as block lengths approach approximately 300 feet. In Utah, the traditional "Mormon grid" calls for blocks of approximately 700 feet. In addition to longer distances to walk to reach amenities, larger block lengths provide fewer pedestrian crossings (or places where cars stop) and do not diffuse traffic as well as smaller, multiple streets. Similarly, psychological factors which allow pedestrians to enjoy milestones and destinations may be more eventful with shorter block lengths and more intersections.

4. Transit Routes Every Half Mile

Much data has suggested that a quarter mile walking distance is general rule of thumb for the maximum distance people will work to reach transit stops. Obviously this varies with the type of service provided and the types of people walking. Yet, if pedestrians will generally walk a quarter mile to reach transit, it follows that transit service should ideally be separated by routes every half mile to achieve full coverage. This rule of thumb should be considered in the design and location of collector and arterial streets which serve development as opposed to a retro-fit of transit routes into a street system which may not achieve such a network density.

5. Appropriately Sized Streets for Vehicles and Pedestrians

As a general rule six lane streets which can offer convenience and better levels of service to motor vehicles create barriers to pedestrians. Similarly, high pedestrian crossing on wide streets cause greater strains on signal timing and erode the quality of motor vehicle travel. Early thought on the density of streets will help alleviate or minimize the need for streets wider than two or four lanes. Existing wide streets, such as SR-224 should be retrofitted with convenient pedestrian crossing opportunities.

6. Continuous, Appropriately Sized Sidewalks

While creating the pedestrian activity is a requisite first step towards creating the need for pedestrian infrastructure, one cannot be advanced without the other. Just as streets are sized to the projected traffic volumes in an area, sidewalks should also be sized so that they are neither crowded nor appear empty. Various standards are available to designate sidewalk width as a function of use. Minimum widths of 5 feet are often recommended to allow couples to walk side by side. Maximum widths of 8 feet to 20 feet may be suitable for high volume locations or areas with multiple sidewalk uses.

7. Safe Crossings

Safe pedestrian crossings may appear simple and uniformly supported, but often conflict with traffic engineering principles for large corner curb radii, addition of intersection turn lanes, and opposition to mid-block crossings. Corner curb radii are typically set at a minimum of 25 feet to allow higher turning speeds. Radii of 5 to 10 feet may be more appropriate for vehicle speeds in the presence of pedestrians. Similarly, wider intersections which allow for right and left turn lanes create greater pedestrian crossing distances. Corner "flares" or "bulb-outs" which shorten the pedestrian distance at intersections are more desirable from a pedestrian standpoint. Finally, mid-block crossings can be supplemented with "neck downs" or "chokers" and are particularly valuable with large block lengths.

8. Appropriate Buffering From Traffic

The inherent safety conflict between motor vehicles and pedestrians must be underscored. Visual and physical separations are necessary for safety but must be implemented to enhance pedestrian comfort. High back curb is often considered a minimum barrier. Parking lanes, bus loading areas, and bicycle lanes all create appropriate buffering between the street realm and the pedestrian realm of public rights-of-way. Trees, light posts, and landscaped buffering is also important in many applications to protect pedestrians from motor vehicle traffic.

9. Street Oriented Buildings

The principle of "visual enclosure" and the sense of "outdoor rooms" can be applied to building setbacks to achieve a streetscape that is psychologically inviting and pleasing to the pedestrian. Drivers often respond to the sense of enclosure by slowing speeds and having a greater awareness of pedestrians. Since this is a subjective value, experts disagree on the exact standards which should be applied. A simple rule of thumb is to create maximum building set backs of 25 feet, with smaller setbacks desirable. Other rules of thumb apply building height to separation width ratios. For example, a 60 foot road right-of-way separating twenty foot tall (2 story) buildings on each side would have a height to width ratio of 1:3 with no set-backs and 1:5 with 20 foot set-backs. Generally, height to width ratios approaching 1:1 are viewed as desirable and height to width ratios of 1:6 are considered at the extreme end of acceptable. Minimum height to width ratios of 1:3 are more commonly accepted. Height to width ratios are valuable since they allow for larger buildings lining larger streets, an apply a standard to support outbuildings as opposed to parking areas.

10. Comfortable Places to Wait

The final "essential" feature of a transit friendly design is to allow pedestrians to wait as well as to move. Benches should be convenient and safe. Other waiting areas such as lawns, shade trees, fountain areas and plazas should also be considered. Ideally, waiting areas become part of the pedestrian fabric and are not placed on the outskirts of pedestrian areas or as a buffer between pedestrian areas and motor vehicle dominated streets, which is often the case with traditional suburban bus benches.

Highly Desirable Features

Like all decisions in life, a line must be drawn between what is wanted and what is needed. Essential features are those that are needed while desirable features are merely wanted. These highly desirable features are often extensions or nuances of the essential features and are very important to consider and implement in creating transit friendly development.

11. Supportive Commercial Uses

Part of the attraction of the single occupant automobile is the personal freedom which it affords and convenience to perform errands. Transit can offer similar freedoms by allowing commercial uses to support transit. These uses can be as simple as coffee shops and newspaper stands and may include dry cleaning, day care centers, and a variety of other uses that make transit and walking more convenient.

12. Gridlike Street Networks

Traditional grid streets, streets that are arranged to create uniform square blocks, provide for direct walking routes which are shorter than curve-linear streets or cul-de-sacs. In addition, a gridlike street network helps to diffuse traffic onto multiple smaller streets. Finally, blocks created by gridlike streets create a stronger sense of both neighborhood and community where there are distinct definitions but few barriers.

13. Appropriate Traffic Calming

Traffic calming is a means to slow traffic and allow streets to be a more pleasant and less intrusive portion of the overall community. Traffic calming measures such as speed tables can be combined with pedestrian crossings to clarify the hierarchy that pedestrians are as important as motor vehicles. Other traffic calming measures such as chokers, chicanes, etc. should also be considered to the extent that they allow motor vehicles and pedestrians to better co-exist.

14. Closely Spaced Shade Trees

Trees contribute to the psychological sense of visual enclosure when planted between the street and the sidewalk. In addition to creating a physical barrier, trees in this location extend the sense of pedestrian space and visually limit the street space, fostering traffic calming. Trees also provide refuge from sun, wind, and snow to make the Summit County climate more comfortable for pedestrians. The movement of leaves and branches also creates a pleasing movement of light and sound which is more appropriate to the human scale than comparably sized buildings. The operable standard is for larger trees to be placed adjacent to the street, as opposed to smaller ornate trees placed closest to the buildings. The former, proposed standard, provides for pedestrian safety while the latter, more common standard, provides greater safety for errant vehicles.

15. Minimize "Dead" Space

Active street level uses promote dynamic pedestrian activity. Parking lots and blank walls create inactive uses. Dominant parking areas further minimize the scale of the pedestrian by creating a sense that motor vehicles are more important than pedestrians.

Various techniques are available to minimize parking requirements such as allowing on-street parking to be considered, implementing satellite parking, and fostering shared use parking. Parking can also be oriented along the side or the back of buildings as opposed to between the pedestrian and the buildings. Blank walls can be made more pleasing through articulated design and landscaping. Park City Main Street is an excellent example of active retail and mixed uses, little "dead space" and a sense of an "outdoor room."

16. Nearby Parks and Other Public Spaces

Recreational walks "around the block" are desired but are more likely to occur when there is a true destination. Similar to the concept of "outdoor rooms," parks and public places can be designed as plazas, playgrounds, or other public areas. These public spaces should be designed to punctuate the street network by breaking up long stretches, providing pleasing places to wait and watch, and to add a sense of "place" to the street environment. The combination of public places, shopping, and other pedestrian destinations create a synergy and adds to the overall appeal of the pedestrian activity. Public spaces also help to define the geography of an area and sense of where you are.

17. Small Scale Buildings

Architecture should support the pedestrian scale as opposed to the "drive-by" scale of the automobile. Larger buildings should be articulated to appear as multiple smaller buildings, since smaller buildings create a greater interest to keep moving to see what's next. This concept supports the notion that pedestrians will walk great distances if they perceive their walk as no more than a short distance (generally around 250 feet) at any one time.

18. Attractive Transit Facilities

The overall appeal of the transit facility also has an impact on the ability of pedestrians to become transit users. Buses and waiting areas should, at a minimum, be clean and attractive. Fare-box collection should be non-threatening. Other features should also be considered which make the transition from pedestrian to transit user harmless and pleasant.

Nice Additional Features

Just as an arbitrary line was drawn to establish "essential" features, priorities must be set for highly desirable features and nice additional features. Many of the nice additional features are simply nuances to design features described in other design elements.

19. Streetwalls

Further expanding on the analogy of "outdoor rooms" is the concept of streetwalls. The overall street area can be framed by buildings which fit within the desired height to width ratios and provide a clear enclosure for the pedestrian realm of the public right-of-way. Street walls are characterized by little or no front set backs and no parking in the front of a building (except for on-street parking).

20. Functional Street Furniture

Just like comfortable places to wait are important, a variety of other functional street furniture are also important. Functional street furniture include benches, bicycle racks, lockers, bus kiosks, light poles, etc.

21. Coherent, Small Scale Signs

Left up to the competitive market, signs progressively get larger and more complex. Through proper control, coherent sign standards can create a less chaotic appearance which is visually attractive without being overwhelming. Traveler reaction studies have shown that overwhelming signs can be ignored and disregarded while signs visible in a single scene can be readily comprehended. Various standards exist which relates the size and specifications of the sign to the speed and size of the street which the sign is presenting.

22. Special Pavement

Special pavements can become the defining "floor" of "outdoor rooms." The color, texture, and pattern of the "floor" add to overall qualities of the room in addition to defining the room's limits. Special pavements can help create the appearance of creating a larger space or breaking up an already large space where no other delineation is present. Special pavements such as special bricks or cobblestones can also help define traffic calming corridors by alerting motorists that they are intruding on pedestrian areas as well as delineating areas for bicycles and other uses which are not clear.

23. Public Art

Finally, spaces that are not defined by buildings or parks can still be defined by public art. Public art is termed loosely to allow for plaques, statues, fountains, and other areas that define where you are and break up the walk from one "place" to the next. Public art supports the concept of turning long walks into a series of several shorter walks and also add to the identity of the area.

8. Transit System Comparisons

A helpful tool in planning transit is to compare the systems of other similar cities and areas. Characteristics such as ridership, funding and capital equipment are compared for several systems in tourist areas below.

Table 9
Transit Characteristics of Similar Areas

Transit Characteristics	Steamboat Springs Colorado	Summit County Colorado	Taos New Mexico	Telluride Colorado
Name of Service(s)	Steamboat Springs Transi	Summit Stage Breckenridge Trolley Frisco Flyer	Chili Line	San Miguel Transit Telluride Gondola
Service Area	City Limits	Summit County & towns	Town Limits, plus 2 miles under County agreement	San Miguel County
Institutional Framework	Municipal Government	County Government	Municipal Government	Informal IGA
Funding Sources	Municipal General Funds	Transit Sales Tax FTA Grants	FTA Grant 2.5% Lodgers Tax Fare Revenue	Gondola: Lodging tax Town and County fund transit, plus FTA funds
Annual Budget	\$1.2 million	\$4,154,262	\$160,000	\$490,000
Staff Levels by season				
Winter	2 Admin 6 Operations 38 Drivers	Admin, 8 65 drivers 2 full time maintenance	2 Admin 6 drivers	3 Admin 3 Operations 15 FTE drivers
Summer	10 Drivers		same	
Spring/Fall		32 permanent drivers	same	
Vehicles/seat Capacity	13 buses 9 in peak service	6 buses 42-psgr 8 buses 38-psgr 4 buses 22-psgr 4 buses 40-psgr Total 804 seats	3 buses 36-psgr 2 vans 2 used at peak	5 buses, 32-psgr 2 vans, 16-psgr 2 buses, 26-psgr 1 trolley bus, 20-psgr
Vehicle Hours	31,820	31,735	10,950	9357
Winter	28,000	Jan. 3,069		7590
Summer	3,820	Aug. 2,387		1767
Days/Times of Service	Year round			
Winter days	Daily	Daily	Daily	Daily
Winter hours	7 am to 1:45 am	5:45 am to 12:30 am	7 am to 10 pm	7 am to 10 pm
Summer days	Daily	Daily	Daily	Daily
Summer hours	7 am to 10:30 pm, wkdy	reduced	Hope to operate same hrs	7 am to 7 pm
Off season days		Daily	Daily	Two seasons
Off season hours		reduced	same	
Fares	No fare	No fare	\$0.50/trip \$1.00/day \$5.00/week hotel passes	Free in town Gondola is free \$1.00 to Lawson Hill
Service Headways	10 to 20 min winter 30 minutes summer	20 to 40 minutes	30 minutes	9 to 11 minutes in Town
Fixed Route				
Demand Response				
Cab Program				
Annual Ridership	700000	569,257	Less than one year	211,597
Winter	560,000		Jan. 2,100	197,013
Summer	140,000		Feb. 3,600	14,631
Off Season	(included with summer)			
Type of Passenger		(1989 data)		Not available
Visitor	95%	58%		
Resident	5%	41%	Feb. Employees, 10%	

Table 10 continued
Transit Characteristics of Similar Areas

Transit Characteristics	Vail Colorado	Eagle County Colorado	Whistler/Blackcomb British Columbia	Winter Park Colorado
Name of Service(s)	Vail Transit	Eagle County Regional Transportation Authority	Whistler Transit System	Winter Park Lift
Service Area	Vail	Eagle County	Whistler (Municipal Boundaries)	Eastern Grand County Winter Park, Fraser
Institutional Framework	Municipal Government	Transit Board	Three party agreement	Ski Resort
Funding Sources	4% lift tax	1/2 cent sales tax	B.C. Transit (Provincial) RMOW Fare box	Lift tax Night service funded by Winter Park, Fraser Ski Area, 90% Town, 10%
Annual Budget	\$2.2 million	\$1.5 million	\$2,040,964	Over \$1 million
Staff Levels by season				
Winter	6 Admin 6 shared maintenance 45 drivers 15 drivers	2 Administrators All service contracted out to Avon, Vail	2 Admin 3 Maintenance 24 drivers 15 drivers	2 Admin 5 Maintenance 35 drivers 15 drivers
Summer	15 drivers			none
Spring/Fall	15 drivers		(only two seasons)	
Vehicles/seat Capacity	8 buses, 27-psgr 27 buses 32-psgr 6 vans, 21-seat	None	9 buses, 40-psgr 7 used at peak.	11 buses, 59-psgr 21 buses, 45-psgr
Vehicle Hours				
Winter	62,000	40,000	26,272	24760
Summer				24200
Summer				560
Days/Times of Service				
Winter days	Daily	Daily	Daily	Daily
Winter hours	22 hours	5 am to midnight	5:34 am to 12:45 am	7 am to 11 pm
Summer days	Daily	Daily	Daily	Daily
Summer hours	19 hours	same	same	9 am to 5 pm
Off season days	Daily	Daily	(only two seasons)	none
Off season hours	12 hours	same		
Fares	No fare	\$2.00 regular \$3.75 Express service	Free zone \$0.50 zone \$1.50 on routes \$1.25 sr/child on routes	No fare
Service Headways	10 min town 15 minutes outlying		20 minutes in village 30 minutes on routes	30 minutes
Fixed Route	30 min summer			15 minutes on demand
Demand Response	1 hr off-season			
Cab Program				
Annual Ridership	3.1 million	1.2 million	845982	653,000
Winter	not available	1	694323	650,000
Summer			136269	3,000
Off Season			96408	none
Type of Passenger				
Visitor	55%	15%	0.15	0.95
Resident	45%	85%	0.85	0.05

Source: Leigh, Scott & * Cleary, Peer Review

9. Funding and Management Options

A. FEDERAL FUNDING SOURCES

Grant Cycles

The UDOT Transit Team administers FTA grants for transit planning and service in Utah (outside of transit authorities or districts in Salt Lake/Ogden, Logan, and Park City). Generally, the grant cycles for UDOT grants begin in February, when service providers are requested to apply for an April deadline. In May or June, the grants are acted on by UDOT staff and appropriate committees and are included in the STIP in July. The grant is actually issued in October, the beginning of the federal fiscal year.

- ❑ Section 5303: This program provides for Transit Planning within each Metropolitan Planning Organizations. The large MPOs, such as the Wasatch Front Regional Council, share by percent of urbanized population approximately \$260,000 annually from this program. UDOT recently established a \$10,000 annual floor for small MPOs such as Logan. The grant cycles for the 5313 and 5303 funds vary slightly from other programs in that a later deadline for applications (June) can be established to still meet the July STIP and October funding deadlines. Because Summit County is not in a Metropolitan Planning Organization, these funds are not available.
- ❑ Section 5307: This is a block grant program to local transit agencies in urbanized areas for capital and operating assistance, and can be used for planning activities. The matching ratio for operating assistance is 50 percent while the matching ratio for capital (and planning) assistance is 80 percent. Funding is distributed annually by formula based on population, population density, and bus revenue miles. The Logan Transit District, for example, is receiving \$300,000 for fiscal year 1999, and the Utah Transit Authority (UTA) will receive close to \$15,000,000 for assistance for UTA service in the Wasatch Front urbanized area.
- ❑ Section 5309: This is a discretionary program for capital funding assistance. It is available to any size transit system, providing up to 80 percent of costs. Historically these funds are used for large capital items such as light rail systems or other large bus transit facilities. Competition for these funds is at a national level, so they can be difficult to secure.
- ❑ Section 5310 (formerly 16(b)(2)): This program provides funding assistance to private non-profit transportation providers for capital improvements for service to senior citizens and persons with disabilities. There is approximately \$350,000 annually available statewide (plus UDOT administrative costs) on a competitive basis. The competition for these funds is competitive. All funds are currently programmed in the STIP to the year 2001, although a 10 percent increase (approximately \$35,000) may be available with the passage of TEA-21. TEA-21 is the most recent federal transportation legislation, which will set the course for federal

funding for the next five years. Funding is provided on an 80 percent federal share and can be programmed directly to transit providers.

- Section 5311 (formerly Section 18): This program has approximately \$600,000 annually for rural transit capital and operating assistance (minus approximately 15 percent for UDOT administration). The match for this program is 80/20 (federal/local) although Utah has typically required a 50/50 match for operating assistance. All available funds are currently programmed in the STIP through the year 2001. TEA-21 may provide up to a 28 percent increase in funding, which would provide an additional \$165,000 annually.
- Section 5313: Section 5313 provides for Statewide Transit Planning. There is approximately \$70,000 available annually. These funds assist with UDOT salaries and has, in the past, supported the development of Transit Development Plans (TDPs) for each Association of Governments throughout the state.

All of the specific projects from these transit programs are listed in the State Transportation Improvement Program (STIP). This document, published by the Utah Department of Transportation (UDOT) on a yearly basis, is a tool to program and track all federal and state highway and transit funding programs and projects over a five year period.

B. LOCAL FUNDING SOURCES

- ♦ Voluntary Assessments: Voluntary assessments require each participating jurisdiction (and participating businesses) to contribute to a transit system.
- ♦ Direct Local Government: This is a direct allocation from a local government's operating budget.
- ♦ County Sales Tax: This is a common means for funding transit services. Utah statute allows a sales tax of ¼ cent to fund public transportation (Public Law 59-12-501). The law does allow for the tax to be applied in a transit district that splits a county.
- ♦ Special Service District: A special service district establishes a boundary to tax for a specific reason. When a special service district is established for the purpose of transit, it is considered a Public Transit District.
- ♦ Property Tax: The County Commission has the option to dedicate property taxes to transit service.
- ♦ Real Estate Transfer Tax: A tax could be levied on each real estate transaction within the county. The tax could be dedicated for financing transit services.

- ♦ Farebox: Fares are nearly always a source of funding for transit. It also has the attractiveness of making the service more politically acceptable since users are helping to pay for costs.
- ♦ Transient Room Tax : The tax may be imposed by municipalities whose transient room capacity is greater than or equal to 66 percent of the permanent census population, and, upon voter approval, an additional 1/2 percent may be imposed.

C. OVERSIGHT OPTIONS

There are several oversight options that should be considered for Summit County service. Three major options are discussed below; extension of Park City Service, development of a new, countywide transit service, and a free market alternative. Although each option is distinct, the possibility of sharing resources between Park City and Summit County exists.

Formation of a Transit District

Urban Public Transit Districts are specifically enabled in the Utah Code (Utah Public Transit District Act, 17A-2) and provide for a multi-city transit service with a transit Board. Although called an "Authority", the Utah Transit Authority (UTA) is an example of a urban transit district under the Utah Code. An area-wide election must be included in the district and can be held at any time. A city or county may withdraw by special election. The formation of a transit district would require two separate public referenda. The first referendum would establish the District, while the second referendum would establish a continued funding source (typically sales tax revenue) to ensure long term operation of the authority and its assets. These can and probably should be voted on concurrently.

- ♦ ***Advantages***

The formation of a transit district allows the entity to use ¼ of 1 percent sales tax towards the establishment and maintenance of a transit system. If the Snyderville Basin / Kimball Junction area became a Transit District, sales tax from a few major generators, such as the Factory Stores or the pending Boyer Development, could boost the amount of available tax revenue.

- ♦ ***Disadvantages***

There is a temporary moratorium on establishing Public Transit Districts. According to Utah Code, until May 1, 2000 there will be no transit districts established. Realistically, a new transit district would probably not be established until November of 2000 after voter referendums and other regulatory processes. The establishment of a transit district would likely encompass the Snyderville Basin / Kimball Junction area and would not consider other areas of the County. If service is to be expanded in the future, the County would have to re-assess the boundaries of the district.

- ♦ ***Additional Issues***

According to Utah code 10-8-86, a Public Transit District cannot be established within a 5 mile radius of any other district without the full consent of the existing transit district. If the County desires to form a district it is extremely important to begin communication with Park City Transit. While it is necessary to have the consent of Park City, it would be optimal to have their complete cooperation. Park City Transit has valuable maintenance and operation resources that would be expensive to duplicate in the County. Also, most of the routes suggested in this study overlap at some location with the Park City service. It is important to evaluate the overlap in resources and service provided by each transit entity and determine cost savings for both.

Direct Service Provided by the County

Transit service can be provided directly by a county. The municipal code (10-8-86) specifically allows for a city or county to fund and provide transit service. The transit service is simply a part of the general services the county provides. The legislation which enables both a district and municipality to tax for public transit (59-12-501) allows for a $\frac{1}{4}$ of 1% sales and use tax to fund public transportation.

- ♦ ***Advantages***

The county would have direct control over the transit system. There are no moratoriums on establishing this type of service. The county could begin service with the Snyderville /Kimball Junction area and expand service to the County without having to re-determine boundary lines.

- ♦ ***Disadvantages***

A completely separate service would require the County to build and acquire their own resources. With existing maintenance and garage resources currently in Park City, it would be an expensive duplication of resources.

- ♦ ***Issues***

The creation of a countywide system that does not integrate with the system in Park City may hinder use for both systems. Demand estimates show that the greatest demand for transit is between Park City and the Snyderville Basin area. If visitors and residents have to change buses to go from an area in Park City to The Canyons, for example, riders will be less likely to use the system.

Expansion of Existing Park City Service

The expansion of Park City Service is an option that would ensure resources are not duplicated, however there are institutional issues that should be explored.

- ♦ ***Advantages***

If Park City were to expand service it would ensure a seamless system to Snyderville Basin, Kimball Junction and the remainder of the County. A very successful existing service could be built upon without the struggles a new system might encounter. There is an existing maintenance garage, buses and staff to be utilized and expanded.

- ♦ ***Disadvantages***

Park City would have to share control of the Transit District with an expanded Board to include members of the County. The financial responsibilities of the County and City would be an issue to resolve.

- ♦ ***Issues***

While providing a seamless transfer through the county, the consolidation of services under the Park City Transit umbrella requires the cooperation of the County and the City to establish an interlocal agreement.

Federal Funding

Although federal funding generally does not provide a sole source for funding transit, many systems receive some benefit. The County should explore grant options (listed above) as a complement to a larger funding scenario.

- ♦ ***Advantages***

This money is available from the government usually with a small match (20%). Funding is available for both capital and operating costs. Funds are available for para-transit. Some funds are discretionary which add flexibility to the system.

- ♦ ***Disadvantages***

If the County were to pursue federal funding sources, it would be in direct competition with Park City. If an interlocal agreement were established, this scenario would not likely be an option, as Park City already benefits from federal sources.

- ♦ ***Issues***

As with many other funding scenarios, the County would have to begin discussions with Park City to assess the 'competition' factor. If the County begins its own service without cooperative agreement with Park City, procurement of these funds should start soon.

Free Market

Currently, the free market is providing transportation services primarily for tourists. The majority of the service is between Salt Lake City and Park City, with most buses and vans serving resorts and major hotels in Park City. Some service is provided for employees of resorts at the cost of the resorts.

- ♦ ***Advantages***

There are no institutional changes made under the free market scenario. No funding needs to be secured

- ♦ ***Disadvantages***

Although free market service may expand, it will not likely provide service to all segments of the population. Service will be limited to those who can pay for it. A comprehensive system under this alternative is not likely.

D. SAMPLE FUNDING SCENARIOS

Sample funding scenarios are prepared to help think through funding and administrative options. The scenario is provided for a 'phase 1' implementation of transit service on the 224 Express and The Canyons shuttle (occurring in 2001), and a phase 2 providing commuter service to Kamas, Oakley, Coalville and Heber (occurring in 2004).

Table 11
Funding Scenario – County Sales Tax
(Assumes increase in service area in 2004)

Potential Capital and Operating Revenue Goals, by Year						
Source	2001	2002	2003	2004	2005	2006
Sales Tax ¹	774,000	774,000	774,000	774,000	774,000	774,000
Sec. 5310 ²				75,000	75,000	75,000
Sec. 5311	50,000	50,000	50,000	200,000	200,000	200,000
Farebox ³	13,600	13,600	13,600	35,500	35,500	35,500
Total Revenue	837,600	837,600	837,600	1,084,000	1,084,000	1,084,000
Operating Costs	415,000	415,000	415,000	570,000	570,000	570,000
Capital Costs	800,000	50,000	50,000	600,000	70,000	70,000
Total Cap. & Op. Costs	1,215,000	465,000	465,000	1,170,000	740,000	770,000
Net Surplus	(377,400)	(4,800)	367,600	281,800	621,800	961,800

¹ Sales tax is based on the following information from the Utah State Tax Commission.

Total Gross Taxable Sales in Summit County (1998)	\$639,289,099
Less Total Gross Taxable Sales in Park City (1998)	\$329,478,517
Total Usable Taxable Sales (Countywide)	\$309,810,582
¼ of 1 percent for transit	\$774,526

THIS EXAMPLE SHOWS THAT IF THE ENTIRE COUNTY WERE INCLUDED IN A DISTRICT, THERE WOULD BE ENOUGH REVENUE GENERATED TO COVER THE COST OF OPERATIONS AND MAINTENANCE FOR SERVICE IN SNYDERVILLE BASIN. IT SHOULD BE NOTED THAT IF A PERCENTAGE OF THE SALES TAX WERE TAKEN TO ACCOUNT FOR A TRANSIT DISTRICT WITHIN THE COUNTY, THE REVENUE WOULD BE REDUCED. IMPLEMENTING SALES TAX REQUIRES VOTER APPROVAL.

² Section 5310 and 5311 are federal funding sources that are pre-programmed until 2003.

³ Farebox, operating costs, and capital costs are taken from Table 6 of this report.

A second funding scenario was suggested to look at the possibility of establishing a district to extract money from developing business enterprise. Table 12 illustrates this option, assuming a three year operation period with service to Snyderville Basin and the Canyons. It is important that before this option is explored any further legal advice be obtained to determine its possibility and legality under Utah Code.

Table 12
Funding Scenario 2 – Business Tax Levy Within Snyderville Basin
(Assumes no increase in service after initial Snyderville start-up)

Potential Capital and Operating Revenue Goals, by Year				
Source	2001	2002	2003	TOTAL
Business Property Tax Levy ¹	--	--	--	1,954,200
Sec. 5310 ²				
Sec. 5311	50,000	50,000	50,000	\$150,000
Farebox ³	13,600	13,600	13,600	\$40,800
Total Revenue				2,145,000
Operating Costs	415,000	415,000	415,000	1,245,000
Capital Costs	800,000	50,000	50,000	900,000
Total Cap. & Op. Costs	1,215,000	465,000	465,000	2,145,000
Net Surplus	0	0	0	0

¹ Assumes business property tax levy based on the establishment of a special improvement district in the Snyderville Basin Area. Preliminary estimates from Economic Planning Systems shows the potential for new business tax revenue to be roughly 400 million in business development. The tax levy was determined based on a 'break-even' need. The formula uses the following assumption:

Business Tax Total = 400,000,000

Total Amount Needed for start-up and operation for three years = 1,954,200

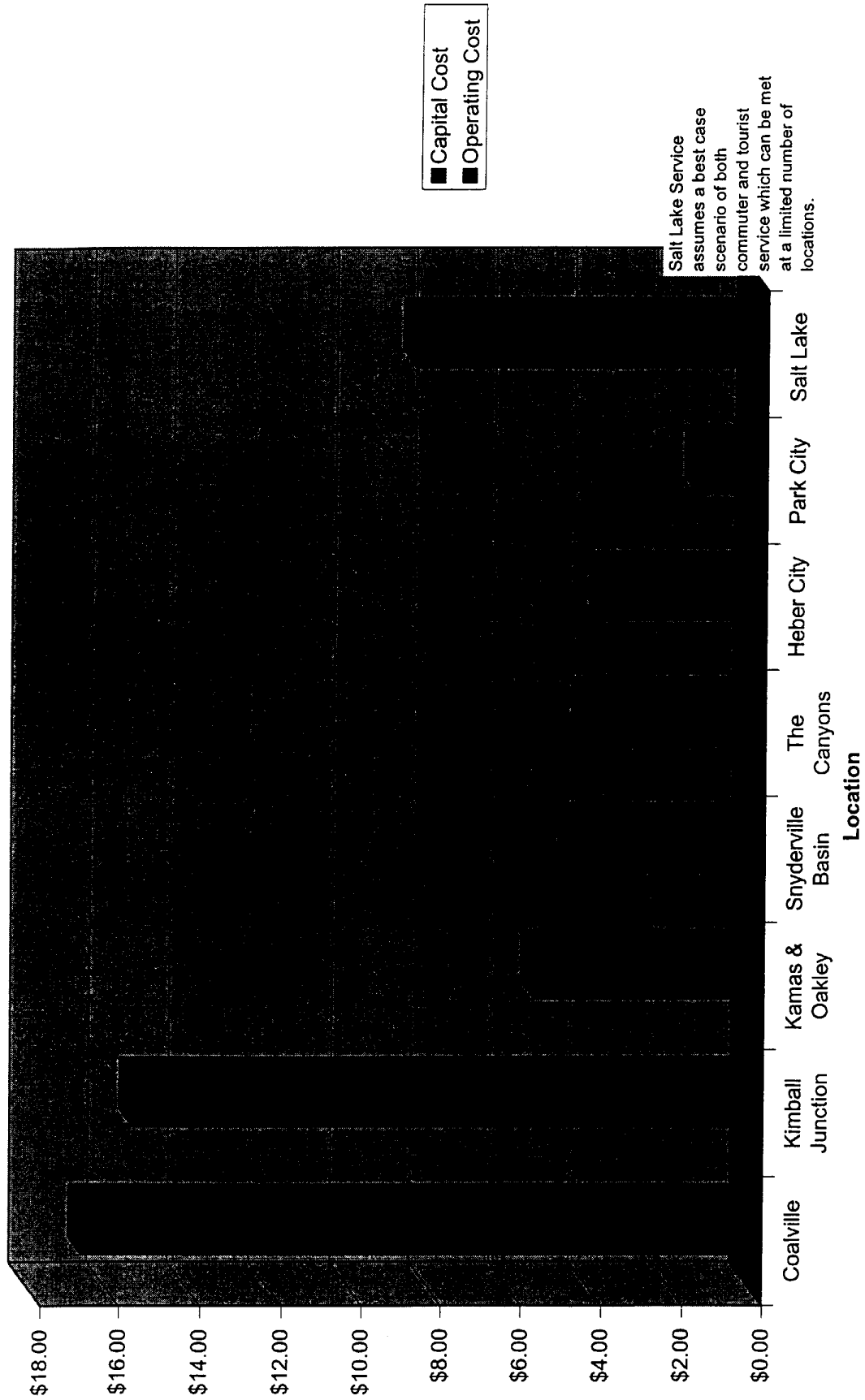
Total Tax Amount Required = .48% (about 1/2 of a cent)

² Section 5310 and 5311 are federal funding sources that are pre-programmed until 2003.

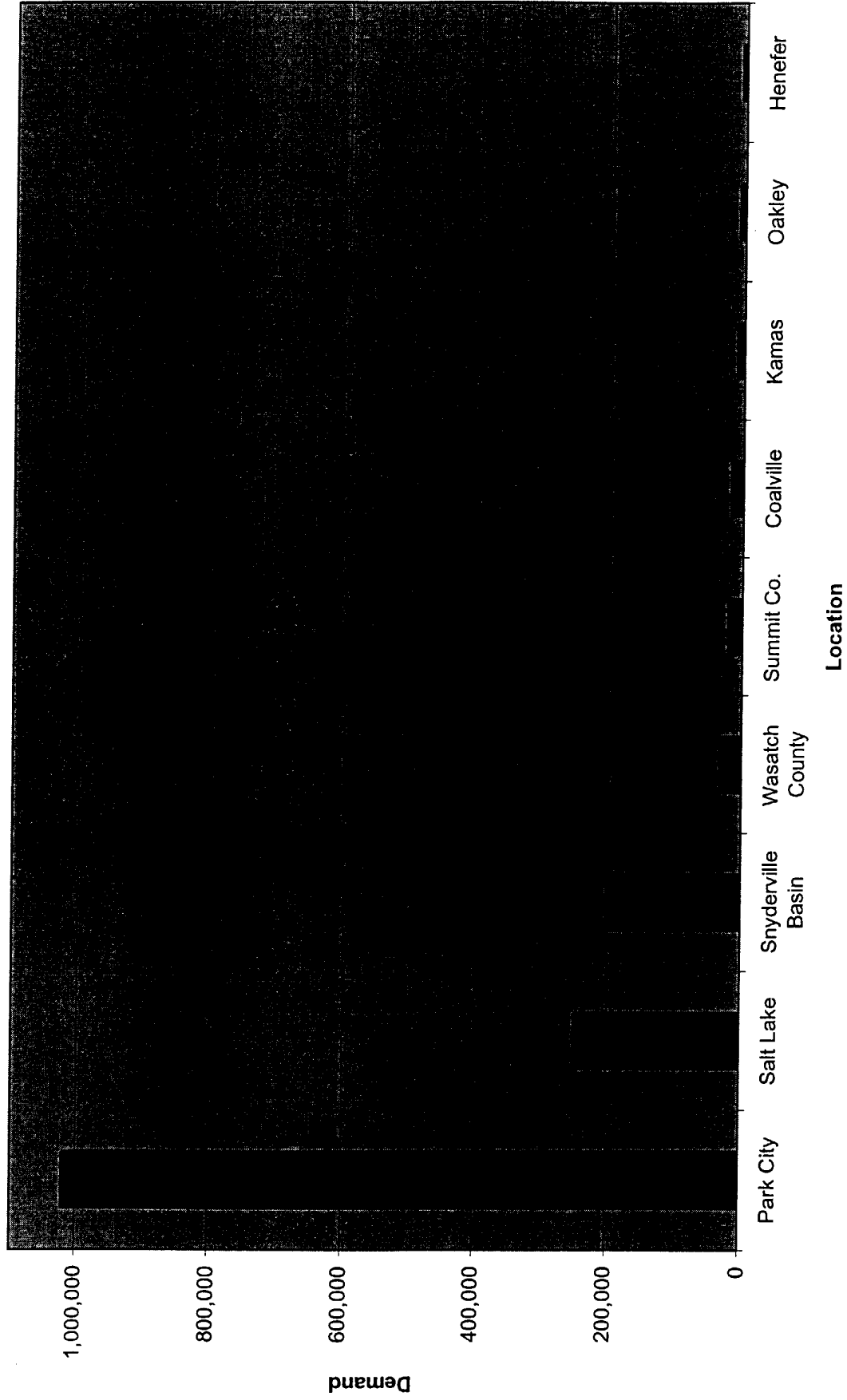
³ Farebox, operating costs, and capital costs are taken from Table 6 of this report.

APPENDIX

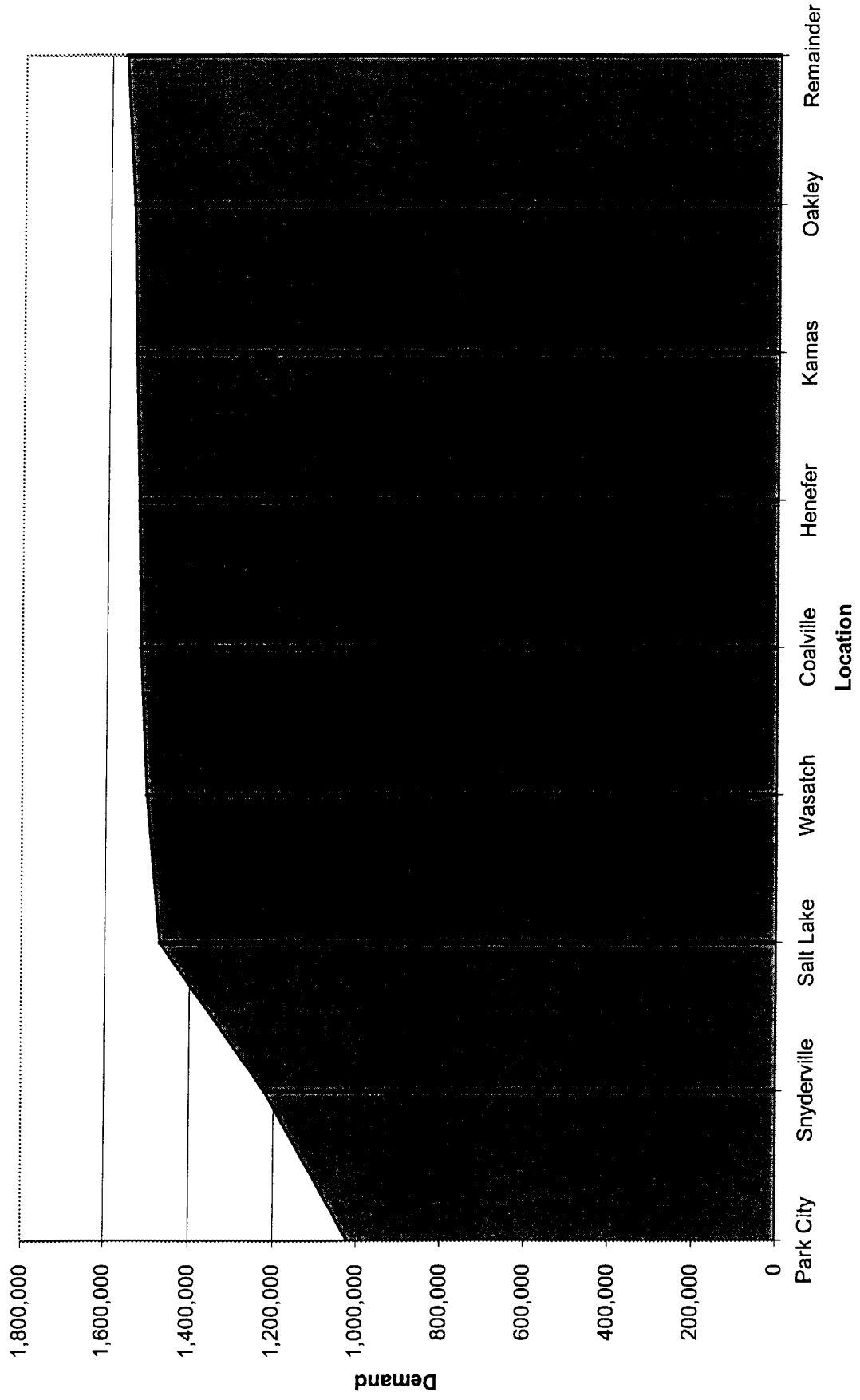
Cost Per Rider by Location



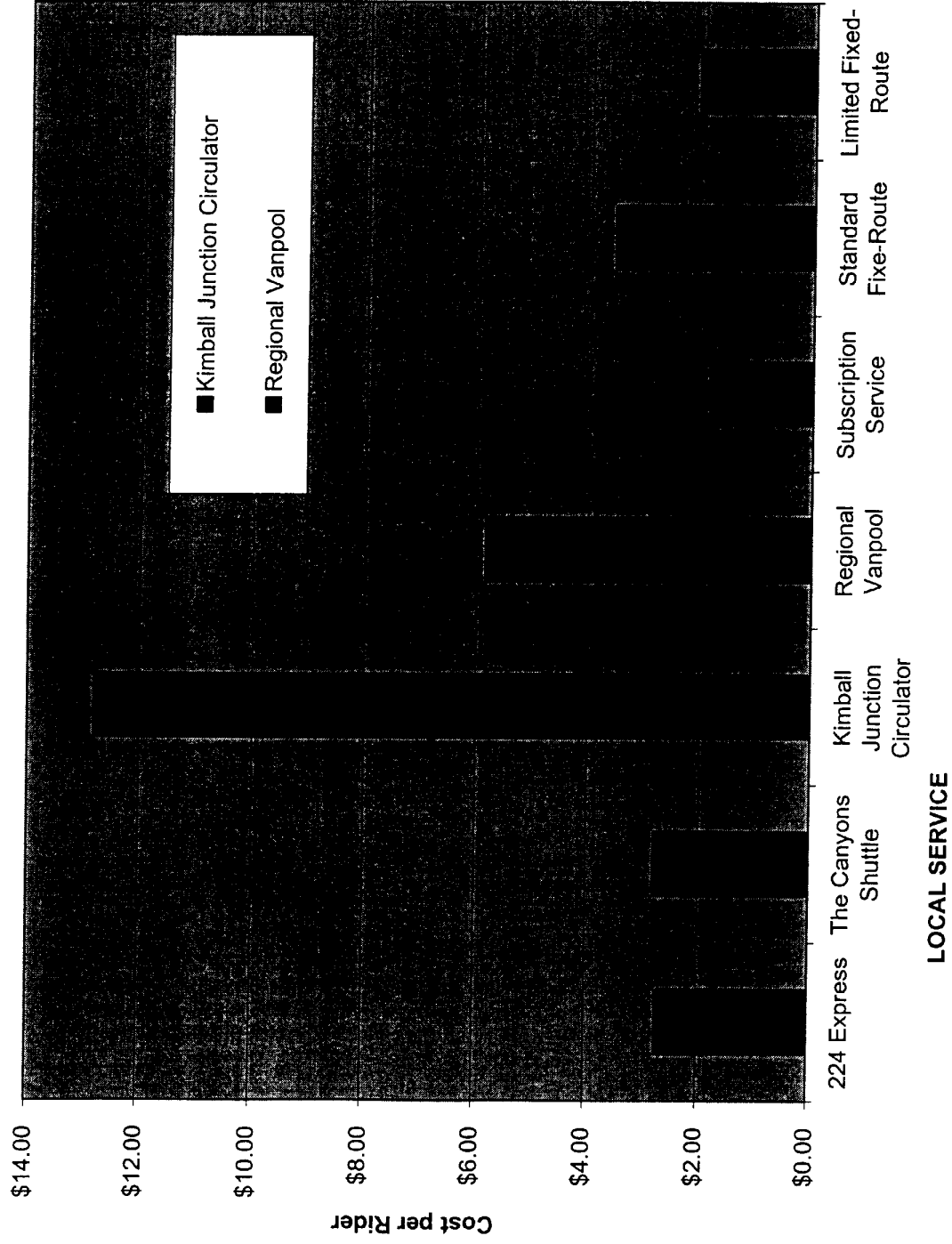
Ridership Estimates by Location



Ridership Estimates by Location



Operating Cost per Rider



Work Trip Distribution - 1990

	Origin	SUMMIT COUNTY						
		Park City	Snyderville	Coalville	Henefer	Kamas	Oakley	Remainder
SUMMIT COUNTY	Park City city	16,026	4,673	1,886	746	845	746	845
	Snyderville Basin	-	3,843	3,717	898	1,378	898	1,378
	Coalville	-	-	297	235	456	310	721
	Henefer	-	-	-	86	240	167	372
	Kamas	-	-	-	-	154	234	869
	Oakley	-	-	-	-	-	81	796
	Remainder	-	-	-	-	-	-	715
	Wasatch Co.							
	Salt Lake Co.							
	TOTAL							

Work Trip Distribution - 1997

	Origin	SUMMIT COUNTY						
		Park City	Snyderville	Coalville	Henefer	Kamas	Oakley	Remainder
SUMMIT COUNTY	Park City city	21,956	6,402	2,584	1,022	1,157	1,022	1,157
	Snyderville Basin	-	5,265	5,092	1,230	1,888	1,230	1,888
	Coalville	-	-	407	321	625	424	988
	Henefer	-	-	-	118	329	228	510
	Kamas	-	-	-	-	211	321	1,191
	Oakley	-	-	-	-	-	110	1,090
	Remainder	-	-	-	-	-	-	980
		21,956	11,667	8,084	2,691	4,209	3,336	7,803
	Wasatch Co.	15,360						
	Salt Lake Co.	40,208						
	TOTAL							

Work Trip Distribution - 2020

	Origin	SUMMIT COUNTY						
		Park City	Snyderville	Coalville	Henefer	Kamas	Oakley	Remainder
SUMMIT COUNTY	Park City city	33,154	9,667	3,902	1,543	1,747	1,543	1,747
	Snyderville Basin	-	7,950	7,690	1,857	2,851	1,857	2,851
	Coalville	-	-	615	485	944	641	1,491
	Henefer	-	-	-	178	496	345	770
	Kamas	-	-	-	-	318	485	1,798
	Oakley	-	-	-	-	-	167	1,646
	Remainder	-	-	-	-	-	-	1,480
		33,154	17,617	12,206	4,064	6,356	5,037	11,782
	Wasatch Co.	23,194						
	Salt Lake Co.	60,714						
	TOTAL							

*Work trips are based on 1990 Census Data

NON-Work Trip Distribution - 1990

	Origin	SUMMIT COUNTY						
		Park City	Snyderville	Coalville	Henefer	Kamas	Oakley	Remainder
SUMMIT COUNTY	Park City	17,629	5,140	2,075	821	929	821	929
	Snyderville	-	4,228	4,089	987	1,516	987	1,516
	Coalville	-	-	327	258	502	341	793
	Henefer	-	-	-	95	264	183	409
	Kamas	-	-	-	-	169	258	956
	Oakley	-	-	-	-	-	89	875
	Remainder	-	-	-	-	-	-	787
	Wasatch							12,333
	Salt Lake							32,284
	TOTAL							92,588

NON-Work Trip Distribution - 1997

		SUMMIT COUNTY						
	Origin	Park City	Snyderville	Coalville	Henefer	Kamas	Oakley	Remainder
SUMMIT COUNTY	Park City	24,152	7,042	2,843	1,124	1,273	1,124	1,273
	Snyderville	-	5,792	5,602	1,353	2,077	1,353	2,077
	Coalville	-	-	448	354	687	467	1,086
	Henefer	-	-	-	130	361	251	561
	Kamas	-	-	-	-	232	353	1,310
	Oakley	-	-	-	-	-	121	1,199
	Remainder	-	-	-	-	-	-	1,078
		24,152	12,834	8,892	2,960	4,630	3,670	8,583
	Wasatch	16,896						
	Salt Lake							
	TOTAL	82,617						

NON-Work Trip Distribution - 2020

		SUMMIT COUNTY						
	Origin	Park City	Snyderville	Coalville	Henefer	Kamas	Oakley	Remainder
SUMMIT COUNTY	Park City	36,469	10,633	4,292	1,698	1,922	1,698	1,922
	Snyderville	-	8,746	8,459	2,043	3,136	2,043	3,136
	Coalville	-	-	676	534	1,038	705	1,640
	Henefer	-	-	-	196	546	379	847
	Kamas	-	-	-	-	350	533	1,977
	Oakley	-	-	-	-	-	183	1,811
	Remainder	-	-	-	-	-	-	1,628
		36,469	19,379	13,427	4,470	6,991	5,541	12,961
	Wasatch	25,514						
	Salt Lake							
	TOTAL	111,791						

Mobility Impaired - 1997

	Origin	SUMMIT COUNTY						
		<i>Park City</i>	<i>Snydervill</i>	<i>Coalville</i>	<i>Henefer</i>	<i>Kamas</i>	<i>Oakley</i>	<i>Remainder</i>
S U M M I T C O	<i>Park City city</i>	46	250	300	35	247	25	1,183
	<i>Snyderville Basin</i>	-	142	237	48	205	40	973
	<i>Coalville</i>	-	-	66	45	123	40	579
	<i>Henefer</i>	-	-	-	4	38	6	182
	<i>Kamas</i>	-	-	-	-	56	34	530
	<i>Oakley</i>	-	-	-	-	-	2	162
	<i>Remainder</i>	-	-	-	-	-	-	1,250
		46	392	604	132	670	148	4,860
	<i>Wasatch Co.</i>	N/A						
	<i>Salt Lake Co.</i>	N/A						
	TOTAL							6,851

Mobility Impaired - 2020

	Origin	SUMMIT COUNTY						
		<i>Park City</i>	<i>Snydervill</i>	<i>Coalville</i>	<i>Henefer</i>	<i>Kamas</i>	<i>Oakley</i>	<i>Remainder</i>
S U M M I T C O	<i>Park City city</i>	70	378	453	53	374	38	1,786
	<i>Snyderville Basin</i>	-	214	358	72	309	60	1,469
	<i>Coalville</i>	-	-	100	68	186	61	875
	<i>Henefer</i>	-	-	-	6	58	9	275
	<i>Kamas</i>	-	-	-	-	85	51	800
	<i>Oakley</i>	-	-	-	-	-	4	245
	<i>Remainder</i>	-	-	-	-	-	-	1,888
		70	592	912	199	1,011	223	7,338
	<i>Wasatch Co.</i>	N/A						
	<i>Salt Lake Co.</i>	N/A						
	TOTAL							10,345

Tourism Demand - Present

	Origin	SUMMIT COUNTY						
		<i>Park City</i>	<i>Snydervill</i>	<i>Coalville</i>	<i>Henefer</i>	<i>Kamas</i>	<i>Oakley</i>	<i>Remainder</i>
S U M M I T C O	<i>Park City city</i>	974,336	164,888					
	<i>Snyderville Basin</i>		12,050					
	<i>Coalville</i>							
	<i>Henefer</i>							
	<i>Kamas</i>							
	<i>Oakley</i>							
	<i>Remainder</i>							
		974,336	176,938					
	<i>Wasatch Co.</i>							
	<i>Salt Lake Co.</i>							140,220
	TOTAL							1,291,494

Tourism Demand - Future

	Origin	SUMMIT COUNTY						
		<i>Park City</i>	<i>Snydervill</i>	<i>Coalville</i>	<i>Henefer</i>	<i>Kamas</i>	<i>Oakley</i>	<i>Remainder</i>
S U M M I T C O	<i>Park City city</i>	1,423,566	681,339					
	<i>Snyderville Basin</i>		81,000					
	<i>Coalville</i>							
	<i>Henefer</i>							
	<i>Kamas</i>							
	<i>Oakley</i>							
	<i>Remainder</i>							
		1,423,566	762,339					
	<i>Wasatch Co.</i>							
	<i>Salt Lake Co.</i>							206,123
	TOTAL							2,392,029

Total Demand - Present

		SUMMIT COUNTY						
		<i>Park City</i>	<i>Snyderville</i>	<i>Coalville</i>	<i>Henefer</i>	<i>Kamas</i>	<i>Oakley</i>	<i>Remainder</i>
S U M M I T C O	<i>Park City city</i>	1,020,490	178,581	5,727	2,181	2,677	2,171	3,613
	<i>Snyderville Basin</i>	-	23,249	10,931	2,630	4,169	2,622	4,937
	<i>Coalville</i>	-	-	921	720	1,435	932	2,653
	<i>Henefer</i>	-	-	-	252	728	486	1,253
	<i>Kamas</i>	-	-	-	-	499	708	3,030
	<i>Oakley</i>	-	-	-	-	-	234	2,452
	<i>Remainder</i>	-	-	-	-	-	-	3,308
	Total Summit	1,020,490	201,830	17,579	5,783	9,509	7,153	21,246
	<i>Wasatch Co.</i>	32,257						
	<i>Salt Lake Co.</i>	248,865						
	TOTAL							1564713.58

Total Demand - Future

		SUMMIT COUNTY						
		<i>Park City</i>	<i>Snyderville</i>	<i>Coalville</i>	<i>Henefer</i>	<i>Kamas</i>	<i>Oakley</i>	<i>Remainder</i>
S U M M I T C O	<i>Park City city</i>	1,493,259	702,017	8,648	3,294	4,042	3,279	5,455
	<i>Snyderville Basin</i>	-	97,910	16,506	3,972	6,296	3,960	7,456
	<i>Coalville</i>	-	-	1,391	1,087	2,167	1,407	4,007
	<i>Henefer</i>	-	-	-	380	1,100	733	1,892
	<i>Kamas</i>	-	-	-	-	753	1,069	4,575
	<i>Oakley</i>	-	-	-	-	-	354	3,702
	<i>Remainder</i>	-	-	-	-	-	-	4,995
	Total Summit	1,493,259	799,927	26,545	8,733	14,358	10,801	32,082
	<i>Wasatch Co.</i>	48,708						
	<i>Salt Lake Co.</i>	266,838						
	TOTAL							2701251.14

Summit County Transit Study
User Survey

944-227

Mountainland Association of Governments and the Utah Department of Transportation are conducting a study to assess the feasibility of implementing transit in Summit County. Transit consists of a variety of options to serve the public, and can include buses, vans or other forms of transportation. Please answer the following questions to help us understand the needs of the community and the major issues surrounding transit in the region. Forms can be submitted to: Fehr & Peers Associates, Inc., 64 E. 6400 South, Suite 330, Murray, UT 84107, FAX: (801) 261-0763.

A. RESIDENCE

1. Where do you live?
2. If this is not a city or town what is the closest community?

B. EMPLOYMENT

1. What is your employment status (please check)?
☐ Full time ☐ Part time ☐ Work at home ☐ Unemployed ☐ Retired ☐ Student ☐ Other (explain)
2. How do you normally get to work (please check)?
☐ Walk ☐ Bicycle ☐ Drive Alone ☐ Carpool ☐ Other (explain) _____
3. Where do you work (closest city or town)?

C. PUBLIC TRANSPORTATION

1. Do you have a vehicle for your personal use?
☐ Yes ☐ No
2. Do you or someone in your household have any special transportation needs?
☐ No ☐ Yes (explain)
3. What geographic areas should transit serve?
4. What would be your primary uses of transit (check all that apply)?
☐ Work ☐ School ☐ Shopping ☐ Recreation ☐ Other _____
5. Would you or someone in your household be willing to pay a fare to use transit?
☐ Yes ☐ No
6. Would you be willing to increase taxes to support a transit system? ☐ Yes ☐ No
7. How often would you or someone in your household use transit?
☐ Daily or More ☐ At Least Weekly ☐ At Least Monthly ☐ Rarely if Ever
8. Would you support a phased approach to implementing transit in Summit County?
☐ No ☐ Yes
9. If yes, what phases would you suggest?

Please add any additional comments on an attached sheet or on the reverse side.

**Summit County Transit Study
Transit Provider Survey**

Mountainland Association of Governments and the Utah Department of Transportation, is conducting a study of the possibility of transit in Summit County. Please answer the following questions to help us understand the existing resources in the region. Forms should be submitted before July 16 to: Fehr & Peers Associates, Inc., 64 E. 6400 South, Suite 330, Murray, UT 84107, FAX: (801) 261-0763. For questions call (801) 261-4700.

A. Agency Information

1. Agency Name _____ Your Name _____
2. Agency Address _____
3. Phone _____
4. Fax _____
5. Primary Purpose of Agency _____

B. Transportation Services

1. What types of transportation services are operated? _____
2. What locations do you serve? _____
3. Do you operate on a fixed route and schedule or a demand-response basis? _____
4. On what days and during what hours do you provide transportation services? _____
5. Do you charge a fare for your services? ☐ Yes ☐ No
6. If yes, what is the fare for each type of passenger? _____
7. What is the address of your central operating address? _____
8. Do you operate seasonally, or vary your hours by season? _____
13. How many drivers do you have?
☐ Full Time ☐ Part Time ☐ Volunteer
14. How many vehicles do you have?
☐ Buses ☐ Vans ☐ Cars ☐ Trucks
15. How many vehicles are in service on an average weekday?
☐ Buses ☐ Vans ☐ Cars ☐ Trucks
16. Identify the total number of vehicles in service during each hour on your typical busiest day of the week.
☐ 6a.m. ☐ 7a.m. ☐ 8a.m. ☐ 9a.m. ☐ 10a.m. ☐ 11a.m. ☐ 12p.m.
☐ 1p.m. ☐ 2p.m. ☐ 3p.m. ☐ 4p.m. ☐ 5p.m. ☐ 6p.m. ☐ 7p.m.

C. Ridership Information

What types of passengers do you transport (Indicate percentage of total of each group)?

☐ General Public ☐ Disabled ☐ Tourists ☐ Students ☐ Other (please specify)

D. Service Characteristics

Please provide the following information based on the most recent year for which data is available:

Year _____

	Directly Operated	Contracted	Total
# of One-Way Passenger Trips			
# of Vehicle Miles			
# of Vehicle Hours			
Operating Costs			
# of Days Operated			

Vehicle miles are the total number of miles traveled by a transit vehicle.

Vehicle hours are defined as the total number of hours transit vehicles are in operation.

E. Sources of Income

What are your sources of income for transportation?

Operating Revenues

Fares/Donations	\$
FTA Section 5310	\$
FTA Section 5311	\$
Title III (OAA)	\$
Head Start	\$
DES	\$
ACTION	\$
Voc. Rehab.	\$
United Way	\$
City	\$
County	\$
Tribal	\$
Other (Explain)	\$
Other (Explain)	\$
TOTAL	\$

F. Future Plans

Please indicate any future plans you may have for transit service below.

Name:

Association:

1. **What important issues face Summit County, and how does public transit relate in importance to these issues?**

2. **Is there a need for public transit in the region? If so, what is that need?**

3. **Would you support a phased approach to the implementation of public transit?**

4. **Who would benefit from transit service?**

5. **How should public transit service be paid for?**

6. **Would the residents of your area support public transit financially?**

7. **What should be the highest priority for public transit services?**

8. **How would you prioritize transit needs in Summit County.**

Fax Cover Sheet

Park City Municipal Corporation



Office of Capital Management & Budget

To: John Nepstad

From: Tom Bakaly

CO: _____

Dept.: _____

Dept.: _____

Phone: _____

Fax: _____

Fax: _____

Comments:

This is a little dated from
our Short-Range Transit
Plan - Steve Moss from
CGC will be calling you.

Thanks -

Tom Bakaly

Transit, the Napa VINE transit service implemented an AVL system on the entire 18-vehicle fleet in 1995, at a cost of \$130,000 (or \$7,200 per vehicle). In addition to vehicle tracking, this system provides for signal preemption when routes are operating behind schedule. While VINE management credits the system in improving service quality, the ongoing operating costs of the system have posed to be a challenge. Specifically, the system requires a software and hardware maintenance cost of approximately \$2,000 per vehicle per year, as well as cellular phone costs that vary between \$600 and \$1,200 per month. In total, the system requires approximately \$46,000 per year in operating costs.

AVL technology is particularly potentially beneficial to Park City Transit, due to the overcrowded buses and traffic delays that occur during the winter ski season. AVL can allow dispatchers to make timely decisions regarding issuing extra "tripper" buses or redirecting regular-route buses as needed to handle waiting crowds. These benefits, however, must be considered in light of the substantial initial and ongoing costs. The Multisystems, Inc. *Service Monitoring Plan Memorandum* dated February 6, 1998, provides a more detailed look at new "intelligent transportation systems" technologies that may be applicable in Park City.

Improved Passenger Amenities

The "street furniture" provided by a transit operation is an important component of the system's attractiveness to both passengers and non-passengers. Bus benches and shelters can play a large role in improving the overall image of a transit system, and in improving the attractiveness of transit as a travel mode. More importantly, shelter is vital to those waiting for buses in harsh weather conditions.

In particular, improved amenities are warranted at the transfer locations. A key element of any fixed-route service operating multiple routes is the provision of attractive, safe, and convenient passenger transfer facilities. The need to wait between buses in an unattractive spot is a strong disincentive for transit usage. The necessity of quality transfer facilities is heightened in the study area by low winter temperatures and harsh snowy conditions.

The installed cost of modern glass and aluminum shelters averages approximately \$5,000 to \$6,000. Maintenance and repair of vandalism to bus benches and shelters is a very minor cost. Modern benches and shelters are very durable and resistant to vandalism. As a result, cleaning and maintenance costs are minor. In addition to improvements at these transfer locations, a reasonable passenger amenity program would provide shelters at locations with 20 or more boardings per day. Benches are also an important passenger amenity, and should be provided at stops with five or more boardings per day.

Intermodal Centers

A key ingredient in both operating an effective public transit service as well as attracting new ridership (particularly for a visitor-serving system) is the provision of safe, comfortable, and attractive passenger facilities. "Intermodal" or "transit" centers can provide attractive "portals" to public transportation services, can accommodate transit vehicles in a manner that minimizes their impact on a community, and can provide important focal points to activity centers. Two major facilities are warranted by existing and planned future transit services, along with two smaller facilities.

Old Town Transit Center

Park City's Old Town area -- currently the second-highest ridership generator on the transit system -- is already impacted by transit buses operating from on-street bus bays along Heber Avenue. This existing facility, moreover, does little to attract ridership to the service, and is confusing to the many first-time riders. With the expansion of transit services, impact on Heber Avenue will be increased substantially. A

new facility serving Old Town is therefore key to the future growth and efficient operation of the transit service.

In developing a program for a transit facility in Old Town, it is essential to maintain the historic quality, scale, and character of the Old Town area. As such, this facility should be as small as possible, while accommodating only those uses that need direct access to Old Town. The Old Town Transit Center is planned to accommodate the following services:

- ▶ A core service consisting of six buses operating consecutive routes to Deer Valley, Park Meadows/Thaynes Canyon, and Prospector Square. Requires 2 bus bays in Old Town.
- ▶ A Silver Lake route operating by a single vehicle. Requires 1 bus bay in Old Town.
- ▶ The Trolley Service will be expanded to two trolleys operating between Old Town and the Resort Center. Requires 1 bus bay in Old Town.
- ▶ A Shopper Shuttle service that directly links residential neighborhoods with commercial centers. Requires 1 bus bay in Old Town. ✓
- ▶ A Prospector Evening Express service that provides direct service between Prospector and Old Town. Can share the Shopper Shuttle bus bay.
- ▶ A Canyons Service may be provided. Can share the Shopper Shuttle bus bay. ✓
- ▶ Commuter Service may someday be operated between Heber City and other residential centers and Old Town. Can share the Shopper Shuttle bus bay. ✓

In total, a minimum of five bus bays are needed in the Old Town area for Park City Transit operations. While more bays would be beneficial from a transit operations perspective, this benefit must be carefully weighed against the increased land requirements and associated impact on Old Town.

Other public uses that warrant inclusion in this Center include the following:

- ▶ A staffed information counter.
- ▶ A single loading/unloading space for tour buses in the Swede Alley area. Once passengers are unloaded, the tour bus driver would be required to move to an outlying location until just before the scheduled departure time.
- ▶ A Taxi Cab Stand can provide an amenity for visitors and residents looking for a cab when leaving the Old Town area, as it provides a single, identified location to find a cab, or to call for a cab and wait in a heated and comfortable environment.
- ▶ Bicycle and Pedestrian travel information can be provided using displays or interactive kiosks.
- ▶ Auto drop-off curb space ("kiss-and-ride") can be provided for drivers dropping off or picking up transit passengers.
- ▶ Parking is required for employees working at the center. No "park-and-ride" parking is needed at this site.
- ▶ Exterior passenger benches and shelter, including a canopy.
- ▶ Interior waiting area.
- ▶ Public rest rooms
- ▶ Public telephones
- ▶ ATM machine
- ▶ Ski lockers

- Vending machines
- Retail

As indicated in Table 35, these uses can be accommodated in a building with a total enclosed square footage of 2,470 square feet. Including bus bays, exterior passenger loading space and landscaping, and circulation drives, this center requires slightly more than one acre of land.

Using these program requirements, a series of seven alternative sites and access plans were developed and presented to the Downtown Action Plan Task Force. This process identified a site located between Swede Alley and Marsac Avenue, to the north of the Marsac Building and south of the "flag lot," as shown in Figure 12. Two-way access would be provided by a transit-only roadway connecting a modern roundabout located at the intersection of Deer Valley Drive and Marsac Avenue with Swede Alley. Direct pedestrian access to Main Street would be provided via a new walkway adjacent to the Silver Junction Mercantile building. The Task Force felt that this site and configuration was preferable, as it reduces traffic impacts (by providing direct bus access to and from Deer Valley Drive), maximizes the number of Old Town businesses that are within convenient walking distance of the transit center, and provides a building and roadway configuration that best fits with the existing urban design of Swede Alley. Elevations of this facility, reflecting one of many potential architectural approaches, is presented as Figure 13.

Develop Intercept Transit Center and Parking at the Snow Creek Site

A second major transit facility is warranted as an intercept transit/park-and-ride center along the SH 224 entrance to Park City. This facility, on the Snow Creek site, is intended to improve overall public transportation services (both locally and intercity) while reducing traffic impacts on the Old Town and Resort Center areas. This facility would serve the following functions:

- Intercept parking and shuttle bus loading for day skiers, as well as for Old Town employees.
- Passenger facilities and bus/van transfer location for Salt Lake City International Airport passenger service, which can also provide sorting space for direct delivery of arriving visitor's luggage.
- Park City's intercity bus station.
- Secondary Park City Transit transfer center, serving the Park Meadows/Thaynes Canyon, Shopper Shuttle, Prospector, and Canyons routes.
- Parking for tour buses.

This facility should be provided through a joint public/private venture.

Enhanced Transit Transfer Points

In addition to the two major transit centers, there are two locations on the PCT system that warrant special passenger amenities:

- The intersection of 9th Street and Main Street (the "Trolley Turnaround") is planned to be the location for transfers between the Trolley service and the core routes. This stop will also increasingly be an important passenger boarding/deboarding location, as the lower Main Street area (including the Town Lift) develops as an important retail, lodging, and ski area access area.